

2022 Sustainability Report

2021 Social Responsibility Report

2020 Social Responsibility Report - A community, even at a distance

2019 Social Responsibility Report – Passion, Rebirth, Ties

2018 Social Responsibility Report - Competence, Commitment, Community

2017 Social Responsibility Report – The value of knowledge for the community and territory

2016 Social Responsibility Report - A path to sustainability

2015 Social Responsibility Report – A commitment to the future

2014 Social Responsibility Report - A legacy from the past, many plans for the future

2013 Social Responsibility Report – A report on our people, projects and results

2012 Social Responsibility Report – People at the heart of knowledge

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Our University has been working for a long time to raise awareness and address gender stereotypes. In accordance with the Gender visibility guidelines for the University of Bologna's institutional communications, approved in 2020, an attempt has been made in this Sustainability Report, whenever possible, to make the female gender explicit or, at least, to use gender-neutral terminology.

When only the masculine form is used in the document, due to graphic requirements or for the sake of brevity, this is meant to refer inclusively to all persons working within the academic community.

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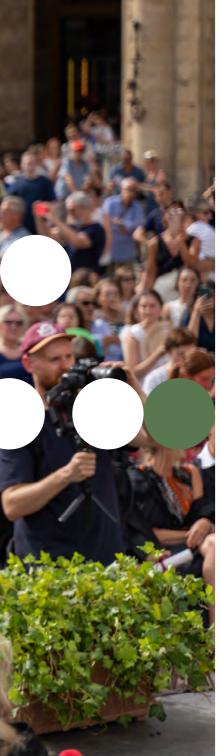
Considering a carbon sequestration capacity for an average deciduous tree of 10-20 CO2 kg per year and an average life span of 30 to 50 years, the planting requirement for the University to cover the entire impact has been estimated at 2-4 trees.



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INTRODUCTION

It is with satisfaction that I present the 2024 Sustainability Report of Alma Mater Studiorum – Università di Bologna. This annual document demonstrates our University's ongoing commitment to sustainability and illustrates the positive effects of sustainable practices that generate economic, social and environmental value for our community and the areas in which we operate. These practices aim not only to reduce costs and waste, but also to improve our learning and working environment, positively impacting the quality of university life.

The principles of sustainability constantly guide the University of Bologna's actions. They contribute to a more comprehensive education, in order to better prepare our students to face global challenges, and to more responsible and innovative research that helps solve the most pressing problems of our time.

The Sustainability Report outlines the University's strategies and choices in terms of sustainability governance, documents the economic value attracted, distributed and retained, and measures the impacts produced in each strategic area: research, teaching, people, society and the environment. Preparing a Sustainability Report to disclose our work to the public requires an ongoing commitment to optimise resource management, reduce waste and improve operational efficiency. Reporting is an essential element of this process: it involves a consistent and transparent assessment of the University's performance and impacts, promoting a culture of continuous improvement. In addition, the Sustainability Report directly engages students, teachers, professional staff and the local community in assessing and improving our University's strategies and impacts.

The 2024 Sustainability Report aligns itself with the Sustainable Development Goals (SDGs) of the United Nations, with a view to fully harmonising actions and impacts. This not only contributes to a more sustainable future, but also provides a clear framework for assessing our quality and impact.

With the support of the entire University community, we will continue to work towards making a positive and lasting impact across all dimensions of sustainability. I would like to thank everyone who helps us shape a better future every day.

Giovanni Molari Rector Alma Mater Studiorum University of Bologna





READING GUIDE

The University of Bologna's Sustainability Report continues the long-standing tradition of social reporting initiated by the University with its first Social Responsibility Report back in 2012.

The Sustainability Report, now in its second edition, aims to give an account of the values, actions, results and impacts of the activities carried out by the University. The content of the Sustainability Report is the result of discussions with the University's stakeholders, especially with the teacher, student and professional staff communities, who, together with the University governing bodies, have shaped its content map. This engagement process has allowed to identify the most material activities and data for reporting purposes. The stakeholder engagement activity took place through dedicated focus groups in February 2024. In line with sustainability reporting standards, our meetings with the stakeholders allowed us to appreciate and assess how the University of Bologna understands and implements its institutional mandate, as well as the results it has achieved, contributing to building a set of shared values and actions from which results and impacts that benefit all of the University communities stem.

In order to disclose the results obtained in the three main areas of sustainability – economic sustainability, social sustainability and environmental sustainability – the University relies on the most widespread standards: the Global Reporting Initiative standards.

The University's 2024-2026 Integrated Activity and Organisation Plan (PIAO) and 2022-2027 Strategic Plan rely on the Sustainable Development Goals (SDGs) of the UN 2030 Agenda to plan and measure the University's actual impacts. These goals express the public value that the University of Bologna offers to its own community and the country.

All the information in the Sustainability Report is tracked in the University Data Warehouse. The reporting period covered by the document is the year 2023.





QS WORLD UNIVERSITY RANKING



TIMES HIGHER EDUCATION WORLD RANKING



QS SUSTAINABILITY



THE IMPACT SDGS 5 UN 2030 (GENDER EQUALITY)



GREEN METRIC



CENSIS



STRUCTURES

5 SCHOOLS
31 DEPARTMENTS
OTHER STRUCTURES



GOVERNING BODIES

RECTOR

ACADEMIC SENATE

BOARD OF

GOVERNORS

VICE RECTORS AND DELEGATES



MANAGEMENT BODY

> DIRECTOR GENERAL



SUPPORT AND CONTROL BODIES

BOARD OF AUDITORS

EVALUATION GROUP



AUXILIARY BODIES

STUDENT COUNCIL

SPONSORS' COMMITTEE

QUALITY COMMITTEE

GUARANTEE COMMITTEE FOR EQUAL OPPORTUNITIES

STUDENT OMBUDSMAN

CONFIDENTIAL COUNSELLOR



ADMINISTRATION

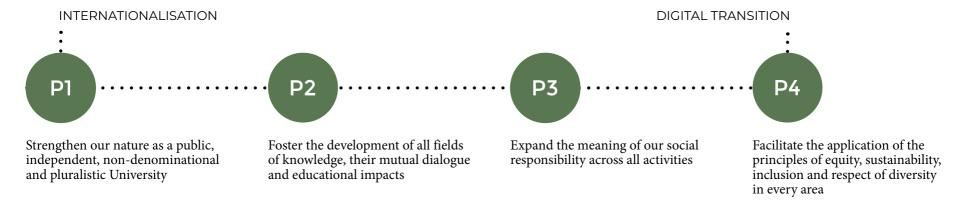
DIVISIONS, UNITS AND OFFICES OF THE BOLOGNA AND ROMAGNA CAMPUSES

1.1 IDENTITY, PRINCIPLES AND VALUES

The University of Bologna is an ever-growing Multicampus University, in terms of both numbers and size, constantly striving to achieve excellence in education and research. Its long tradition, ongoing efforts and orientation towards the future enable the University of Bologna to be a dynamic community where seemingly incompatible values and goals harmoniously coexist, integrate and strengthen each other.

Facing the new challenges and opportunities that future brings, as well as the complexities of our economic and social context, the University of Bologna strives to reiterate and strengthen its proudly multifaceted identity, which we are all committed to nurture every day.

The four principles that underpin the University of Bologna's activity incorporate two cross-cutting actions – internationalisation and digital transition.



The two cross-cutting actions are supplemented by the dimension of Quality Assurance (QA) in the areas of teaching, research and the third mission. The new University Statute, which came into force on 15 March 2024, enshrines the importance of QA, to be implemented by measuring the value and quality of the University's three missions, as well as the effectiveness and efficiency of its services and facilities and the adequacy of its administration system. Quality has thus been embedded into the University's principles, values and actions, and for this reason the University Quality Committee has become a statutory body in its own right.

The <u>University Quality Committee</u> promotes a culture of quality and supports monitoring and review of the QA System, understood as a set of organisational structures, processes and procedures. The Committee was renewed in July 2023 in order to meet the new challenges facing the University and is governed by special regulations that stipulate that it is composed of teachers who are highly competent and experienced in the field of QA, as well as of Student Council representatives and of the executive in charge of supporting the evaluation



and development of the University's QA. The University Quality Committee is chaired by the Rector and is currently organised – in response to the opportunities offered by the accreditation system of the Italian National Agency for the Evaluation of Universities and Research Institutes (\underline{ANVUR}) – into working groups by subject area, coordinated by an Operating Committee.

The **University Quality Policies** document prepared by the Committee describes the guiding principles underlying the reorganisation of the quality assurance and continuous improvement system that the University seeks to promote and the goals (paragraph 3) it pursues in all the areas of activity in which it fulfils its missions, also in connection with the 2022-2027 Strategic Plan.

The University has equipped itself with a set of tools to disseminate and protect its own values and to create public value. Our Statute and <u>Code of Ethics and Conduct</u> outline the key values of the University community and our system of <u>regulations</u>, <u>guidelines and internal codes</u> identifies the rules, beliefs and provisions for protecting and monitoring each area of University activity.

To ensure lawfulness, transparency and the prevention of corruption, the Anti-Corruption strategy is incorporated every year into the Integrated Activity and Organisation Plan (<u>PIAO</u>). The Transparency section of the website discloses significant information and guarantees everyone's right to access University documents.

At the same time, the University promotes equal opportunities, equity, and social and occupational inclusion through measures and actions that enhance diversity and prevent and combat all forms of discrimination and inequality. These goals are outlined in the 2022-2026 Gender Equality Plan (GEP). The University of Bologna is committed to reporting on social inclusion on an annual basis by preparing a <u>Gender Equality Report</u>.

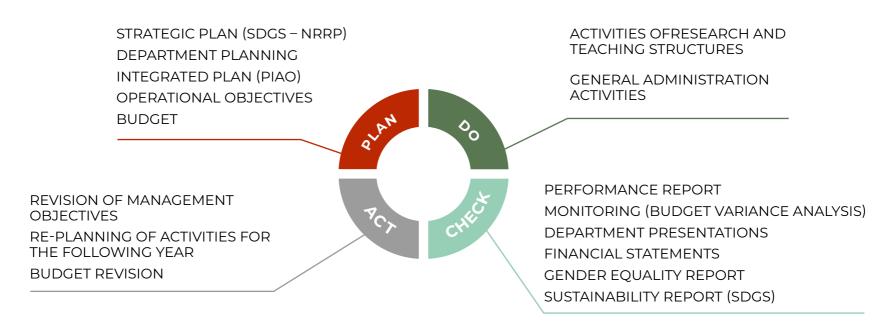
In 2023, the University boosted its digital transformation strategy through actions aimed at improving information system integration and data interoperability in order to simplify administrative processes, including those supporting research and teaching. Furthermore, the digitisation of real estate management processes and of energy consumption monitoring has allowed optimising the use of resources, reducing operating costs and promoting technological solutions that favour environmental sustainability. Another strategic direction is the use of innovative technologies such as blockchain to facilitate international student mobility within the Una Europa alliance. The University's digital transformation strategy is implemented with respect for individual rights and the values of inclusion and elimination of all forms of technological discrimination.

Key interventions in 2023:

- Digitisation of processes concerning the activation of degree programmes;
- Full implementation of the Virtual Helpdesks and activation of the asynchronous communication mode;
- Digitisation of processes concerning staff management;
- Continuation of the re-engineering and digitisation of PhD programme processes;
- Experimentation with the use of blockchain technologies supporting international mobility;
- Continuation of the digitisation of real estate management;
- Launch of the digitisation of energy consumption management and monitoring.

1.2 ACTIONS AND RESULTS

The University relies on an integrated suite of tools and documents to plan actions and measure goals. The Sustainability Report contributes to building a common identity for the University and its many communities, assessing how the University's activities have helped improve the economic, social and environmental well-being of the areas in which it operates.

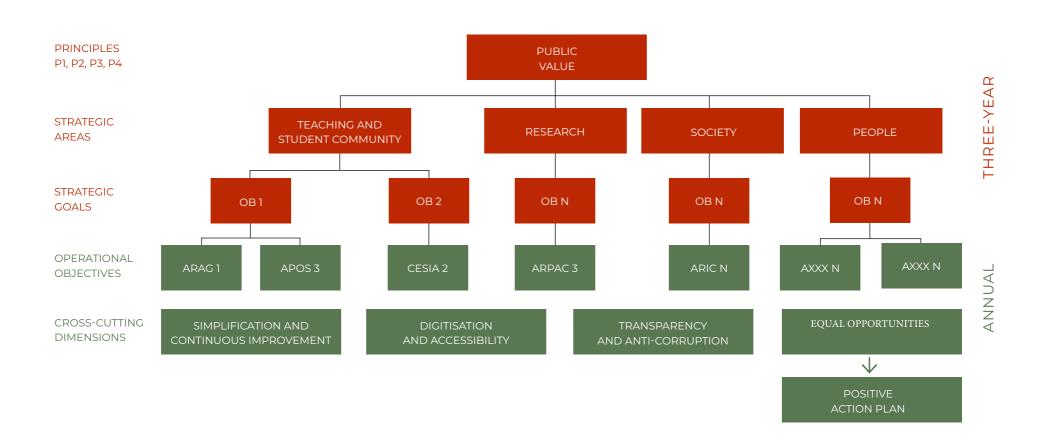


The University has equipped itself with a plan that builds on its founding principles and highest level strategic goals to define the operational objectives of individual organisational units. The ultimate aim of all of the University's activities is to improve its impacts on the creation of Public Value. From this perspective, the choice has been to understand the notion of public value within the conceptual and methodological framework of the Sustainable Development Goals of the UN 2030 Agenda.

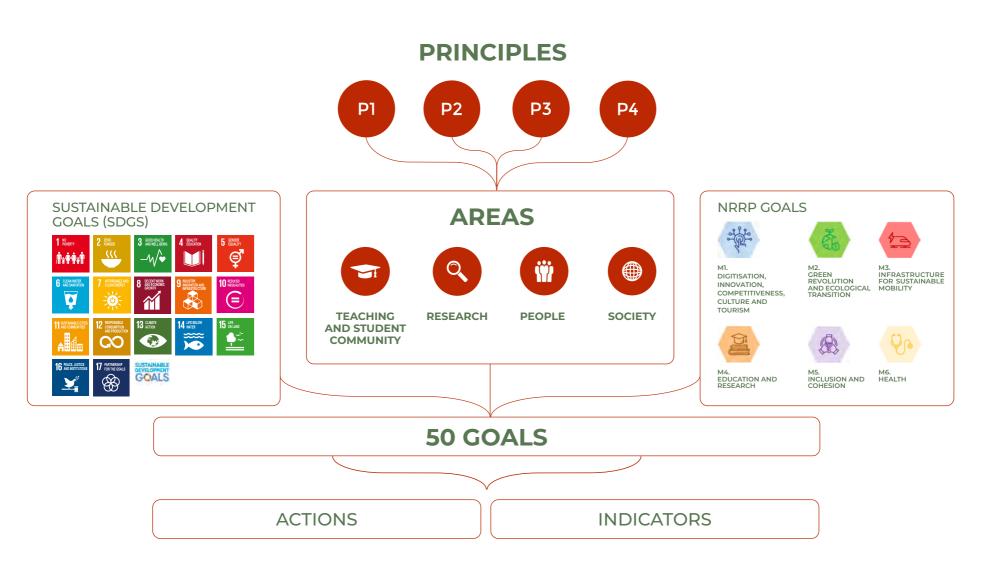
Such complex planning system is clarified in the University Strategic Plan and Integrated Activity and Organisation Plan (PIAO). These documents, each meeting stringent technical and legal requirements, effectively give rise to a single, articulate system of complementary parts: while the Strategic Plan defines areas and strategies based on the founding principles, the PIAO translates those strategies into the operational objectives of individual organisational units and defines the public value impacts linked to the principles underlying all planning. This is a key aspect because the four founding principles on which all planning is based are reified, and thus

made measurable. The Public Value targets linked to the UN Sustainability Development Goals on which the University has a direct impact have been identified as follows:

- SDG 4, Target 4.3 Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university;
- SDG 16, Target 16.6 Develop effective, accountable and transparent institutions at all levels;
- SDG 17, Target 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation.

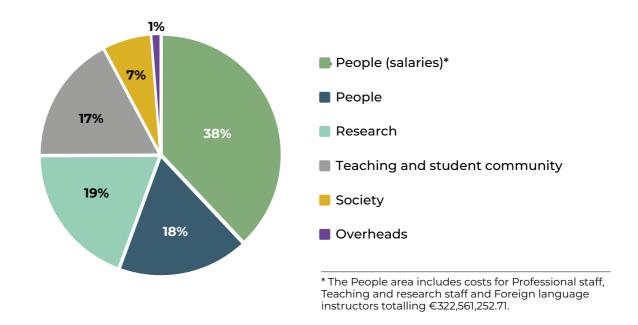


The Strategic Plan sets out the University of Bologna's priorities and guides its future actions. In addition to the four fundamental principles, it identifies four key areas: Teaching and student community, Research, People, Society. These principles translate into 50 goals with specific actions, contributing to the implementation of the Italian National Recovery and Resilience Plan (NRRP) and the Sustainable Development Goals (SDGs) of the UN 2030 Agenda.



The University of Bologna's goals and objectives are achieved thanks to the resources it allocates in the annual Budget – both the economic budget and the investment budget. After the planning stage, the University begins work and checks the results obtained by drafting several documents to report on its actions to the various stakeholders. Since 2023, we have been able to provide evidence of how the budget is used to achieve the various strategic goals and objectives, thus offering a comprehensive understanding of goal reporting also in economic and financial terms.

Figure 1 – Costs by strategic area



¹ Costs for Professional staff, Teaching and research staff and Foreign language instructors.

1.3 GOVERNANCE AND ORGANISATION

GOVERNING BODIES

RECTOR

VICE RECTORS AND DELEGATES

ACADEMIC SENATE

BOARD OF GOVERNORS

SUPPORT AND CONTROL BODIES

BOARD OF AUDITORS

EVALUATION GROUP

MANAGEMENT BODY

DIRECTOR GENERAL

Deputy

Teaching

- Teacher Training
- International Training and New Activities
- Postgraduate Education
- Multilingualism
- Guidance for Graduates (and Alma Matris Alumni)

Personnel

- Occupational Well-Being
- Trade Union Relations

International Relations

- International Agreements and Networks
- Cooperation and Development
- Mobility of Teachers, Students and Professional Staff
- Una Europa

Research

- Biomedical Research with Hospitals
- PhD
- Competitive Research Projects
- Open Science and Research Data

Digital Transformation

Delegates and Appointees

- Equipment and Infrastructure
- Budget and Planning
- Institutional Communications
- Disability
- Constructions
- Equity, Inclusion and Diversity
- Imola Departments and Academic Structures
- Imola Institutional and Local Community Relations
- Public Engagement

- Interdisciplinarity
- Guidance for Prospective Students and Ongoing Guidance
- Cultural Heritage
- Relations with the Health Service
- Industrial Relations and Research
- Process Streamlining
- Sustainability
- Sport
- Students

AUXILIARY BODIES

STUDENT COUNCIL

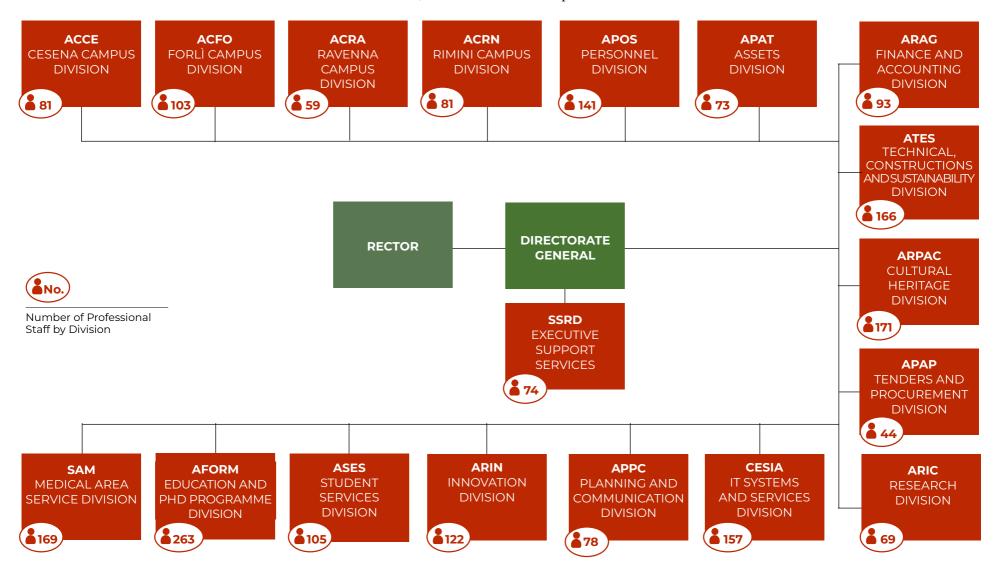
SPONSORS'

STUDENT OMBUDSMAN GUARANTEE COMMITTEE FOR EQUAL OPPORTUNITIES

CONFIDENTIAL COUNSELLOR

QUALITY COMMITTEE The University of Bologna organises its activities through its **Divisions** and **Departments**.

Divisions are the General Administration operational units and provide technical and administrative services and teaching, research and third mission support services. They act in accordance with common rules, standards and models to effectively and efficiently meet the various communities' needs (students, teachers, professional staff). Divisions also oversee specific functions and locations.



The 31 Departments of the University of Bologna deal with scientific research, third mission, and teaching and training activities. They coordinate and support their teachers and researchers' research activities and organise and manage degree programmes for students. Each Department has its own Head and decision-making body, the Department Board, ensuring that it is managed independently.

Area	Department	Teachers and researchers	Professional staff
	1. Chemistry "Giacomo Ciamician" – CHIM	92	37
	2. Industrial Chemistry "Toso Montanari" – CHIMIND	74	32
	3. Pharmacy and Biotechnology – FaBiT	124	45
SCIENCE	4. Physics and Astronomy "Augusto Righi" – DIFA	154	40
	5. Mathematics – MAT	105	13
	6. Biological, Geological and Environmental Sciences – BiGeA	94	33
	7. Life Quality Studies – QUVI	57	9
	8. Architecture – DA	61	15
TECHNOLOGY	9. Computer Science and Engineering – DISI	115	19
	10. Civil, Chemical, Environmental and Materials Engineering – DICAM	131	47
	11. Electrical, Electronic and Information Engineering "G. Marconi" – DEI	148	42
	12. Industrial Engineering – DIN	117	37
	13. Agricultural and Food Sciences – DISTAL	174	116
	14. Biomedical and Neuromotor Sciences – DIBINEM	147	56
MEDICINE	15. Medical and Surgical Sciences – DIMEC	311	67
	16. Veterinary Medical Sciences – DIMEVET	124	81

Area	Department	Teachers and researchers	Professional staff
	17. Cultural Heritage – DBC	59	13
	18. Arts – DAR	113	25
	19. Classical Philology and Italian Studies – FICLIT	78	18
	20. Philosophy – FILO	49	26
HUMANITIES	21. Interpreting and Translation – DIT	53	22
	22. Modern Languages, Literatures and Cultures – LILEC	68	54
	23. Psychology "Renzo Canestrari" – PSI	71	17
	24. Education Studies "Giovanni Maria Bertin" – EDU	87	27
	25. History and Cultures – DiSCi	117	52
	26. Management – DiSA	109	14
SOCIAL STUDIES	27. Economics – DSE	111	16
	28. Legal Studies – DSG	164	14
	29. Political and Social Sciences – SPS	112	18
	30. Statistical Sciences "Paolo Fortunati" – STAT	92	19
	31. Sociology and Business Law – SDE	71	12

In addition, the University has 18 **Research and Training Centres** and seven **Interdepartmental Research Centres** (CIRI; see Section 7). The Centres encourage collaboration among researchers from the Departments involved; some have their own specialist laboratories to carry out research.

RESEARCH AND TRAINING CENTRES

- ARCES ADVANCED RESEARCH CENTRE ON ELECTRONIC SYSTEMS "ERCOLE DE CASTRO"
- · A.U.B. UNIVERSITY OF BOLOGNA EXPERIMENTAL FARM
- · CAST CENTRE FOR ADVANCED STUDIES IN TOURISM
- UNIVERSITY CENTRE FOR THE PROTECTION AND PROMOTION OF HEALTH AND SAFETY:
 - A. OCCUPATIONAL HEALTH AND SAFETY SERVICE
- B. SERVICE FOR ANIMAL WELFARE IN UNIVERSITY TEACHING AND SCIENTIFIC FACILITIES
- ALMA MATER INSTITUTE ON HEALTHY PLANET (ALMA HEALTHY PLANET) INTERDEPARTMENTAL RESEARCH CENTRE
- · ALMA MATER RESEARCH INSTITUTE FOR HUMAN-CENTRED ARTIFICIAL INTELLIGENCE (ALMA AI) INTERDEPARTMENTAL RESEARCH CENTRE
- · ALMA MATER RESEARCH INSTITUTE ON GLOBAL CHALLENGES AND CLIMATE CHANGE (ALMA CLIMATE) INTERDEPARTMENTAL RESEARCH CENTRE
- · INTERNATIONAL CENTRE FOR HUMANISTIC STUDIES "UMBERTO ECO"
- · CFI TEACHER TRAINING CENTRE OF ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA
- · CILDIC CHEMISTRY TEACHING LABORATORY CENTRE
- · CIRSA INTERDEPARTMENTAL RESEARCH CENTRE FOR ENVIRONMENTAL SCIENCES
- · CRBA CENTRE FOR APPLIED BIOMEDICAL RESEARCH
- · CRIFSP PUBLIC SECTOR RESEARCH AND TRAINING CENTRE
- · ISS INSTITUTE FOR HIGHER STUDIES
- · SPISA SPECIALISATION SCHOOL FOR PUBLIC ADMINISTRATION STUDIES
- · SPECIALISATION SCHOOL FOR LEGAL PROFESSIONS "ENRICO REDENTI"
- · SSPS ADVANCED SCHOOL FOR HEALTH POLICY
- · SSCT ADVANCED SCHOOL OF STUDIES ON THE CITY AND TERRITORY

Lastly, **Schools** are organisational units that link and coordinate member Departments with a view to streamlining, supporting and managing their programme catalogues. The Schools of Engineering, Economics and Management, Arts, Humanities and Cultural Heritage, Science, and Medicine have been in operation until 2023.

The University of Bologna has a **Multicampus** structure since 1989. In addition to the Bologna Campus, there are other Campuses in Cesena, Forlì, Ravenna and Rimini. Each Campus has a strong scientific and educational identity, and its own facilities and services dedicated to institutional, cultural, sports activities and associations. Each site hosts Schools, Departments or Campus-specific Organisational Units and coordinates services and initiatives in support of teaching and research activities and of students. Campuses also actively cooperate with local bodies, associations and private organisations for the cultural, economic and social development of the areas.

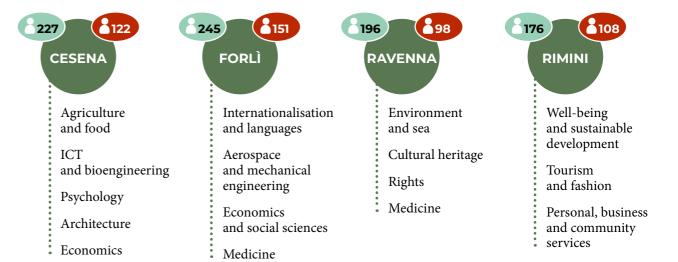
Specialisations of the University of Bologna Campuses



Number of Teaching Staff by Campus



Number of Professional Staff by Campus





2.1 GUIDELINES

The Sustainability Report follows the **Global Reporting Initiative guidelines (GRI Standards 2021)**. The results achieved are represented in relation to the **Sustainable Development Goals (SDGs)** of the UN 2030 Agenda. In addition, in preparing this Report, reference was made to the document Il Bilancio di Sostenibilità delle Università (Sustainability Reporting for Universities), issued by Gruppo di Studio sul Bilancio Sociale in cooperation with the Italian University Network for Sustainable Development (GBS and RUS, March 2021), and to the Italian Ministry of Public Administration's Directive on social reporting in public administrations (Directive⁴ 2006).

The scope of reporting is restricted to the activities carried out directly by the University through its internal structures. Any activities and results of subsidiary and associated companies are not included in the scope of reporting.

The information in the document is tracked in the University's information systems. In particular, unless otherwise indicated, quantitative data are sourced from the **Data Warehouse**, which in turn is fed with data from the internal management systems. Qualitative data come from institutional documents, from the website and intranet, from periodic reports drafted in compliance with the regulations in force, and from other internal sources checked according to the **principle of reliability**.

According to the **principle of annuality**, the reporting period is the calendar year 2023, with the exception of the data in the Teaching and student community section, which relate to the 2023/24 academic year. While data are not always 'final', but rather up-to-date at the time of reporting, this period allows relevant information to be provided to readers in a timely manner, so that they can make informed decisions in good time (**principle of timeliness**). In addition, some of the data and quantitative indicators are presented on a multi-year basis, which enables readers to appreciate the changes in the University's performance over time and, in some cases, compare them with national averages and other mega-universities (**principle of comparability**).

In order to ensure that it is as accessible and comprehensible as possible for all stakeholders, the document was drafted with a view to synthesis and clarity, using accessible terminology and providing an explanation of technical terms and acronyms (**principle of clarity**). For the first time this year, the document (including charts and tables) seeks to follow as closely as possible the accessibility guidelines of the Agency for Digital Italy.

The gradual and targeted involvement of the various stakeholders (**principle of inclusiveness**) has made it possible to identify the most material activities and data for reporting purposes (**principle of materiality**) and the most significant information on the actions carried out in 2023. This enables the results of the organisation as a whole to be assessed (**principle of completeness**).

The information and indicators reported were confirmed and supplemented through discussions with internal coordinators and by examining the strategies, objectives and content of the planning documents.

Reporting encompasses the economic, social and environmental dimensions (**principle of sustainability context**). It reflects both the positive and negative aspects of our performance, allowing a reasoned assessment of

GRI – Global Reporting Initiative (2021), Consolidated Set of the GRI Standards 2021, available online at the following <u>link</u>.

The document is available at the following <u>link</u>.

⁴ Directive – Italian Ministry of Public Administration's Directive on social reporting in public administrations, published in Official Gazette no. 63 of 16 March 2006.



results (**principle of balance**) and a measurement of the contribution made by the University to improving or worsening the local sustainability framework.

In order to provide a fair view of our performance, preference was given to the presentation of directly measurable qualitative and quantitative information, avoiding the use of estimates. Any estimates made are noted within the document, stating their sources and calculation methods (**principle of accuracy**).

2.2 STAKEHOLDERS AND ENGAGEMENT

Stakeholders include students, teachers, professional staff, institutions, organisations, businesses and communities. The University's efforts generate results that have an impact on its stakeholders, informing their behaviour and choices. For this reason, the Sustainability Report aims to illustrate the relationship between the University and its stakeholders in order to collaborate in building paths that guide the University itself towards results in line with the expectations of the various stakeholder groups. The active engagement of stakeholders favours the sharing of results and their impacts, as well as a collective reflection on the strategies and future needs that are to be met.

The stakeholder groups are represented on the side.

The initiatives launched to engage stakeholders in the identification of material topics, the design of content and the choice of metrics for the Sustainability Report include:

- Interviews with the Rector, Vice Rectors and Delegates;
- Focus groups to engage students and staff in the identification of material topics, involving members of the Professional Staff Council and of the Student Council;
- Involvement of a number of internal offices in the processing of information and data for reporting purposes, as well as discussions on their materiality;
- Approval of the document after presentation and discussion at the meetings of the Sponsors' Committee, the Student Council, the Academic Senate and the Board of Governors.



FOCUS GROUPS: PARTICIPATORY STAKEHOLDER ENGAGEMENT

A focus group is an engagement method, understood as a chance to discuss which sustainability aspects are material to stakeholders, what their content is and what tools can be used to measure them. Focus groups were held in the early months of 2024 with governing bodies, professional staff and the student community, in order to discuss how 2023 results should be reported.

Each focus group took part in the following activities, lasting approximately 3 hours:

- · Document presentation;
- Brainstorming in subgroups to analyse the document content with respect to the materiality and length of text;
- Definition of proposals and presentation to all participants;
- · Discussion, evaluation and prioritisation.

The focus groups were supported by experts from the Technical Reporting Committee and the University Planning and Data Analysis Unit.

Our gratitude goes to all colleagues and students who shared this experience of engagement and growth. On the other hand, the University of Bologna's partner businesses were engaged through a direct exchange of reflections during the presentation of the University-businesses joint activities.

2.3 MATERIALITY

The Sustainability Report focusses on material topics, i.e. topics of particular significance to stakeholders. The materiality analysis of economic, environmental and social aspects considered material must be included in the 2023 Sustainability Report.

Materiality is the dimension within which a certain aspect of the relationship between the University and its stakeholders is able to influence the organisation's capacity to create public value. By analysing its material topics, an organisation is able to disclose whether it produces significant impacts and substantially influences stakeholder evaluations or decisions about the organisation itself. This process helps understand stakeholder engagement, prioritise resource use and manage risks.

Various methods were adopted in the process to identify material aspects and related indicators. These include analysing internal documentation, analysing sectoral standards such as the Sustainability Accounting Standard Board (SASB) standards, in addition to those already mentioned, and analysing and benchmarking sector peers.

A materiality analysis involves prioritising the topics according to their significance as identified by the governing bodies and a panel of stakeholders. One-to-one interviews were conducted with members of the governing bodies, while focus groups were set up to listen to a selected sample of the main stakeholders in each group. In developing a materiality analysis through participatory engagement, the University decided to focus on internal stakeholders by conducting focus groups with students and staff. The University also continued to involve businesses that have a direct relationship with it through meetings for listening to their needs and priorities, such as the "Industrial partnership: Business community" event. From the next edition of the Sustainability Report onwards, the analysis of material topics will be extended to external stakeholders such as networks and public administrations. The combination of internal and external materiality for each aspect results in a score that allows such topics to be assigned various degrees of priority and enables selecting a limited set on which to focus action and reporting.

The process to identify the topics to be included in the materiality table was based on the following steps:

- Identification of material aspects and elements based on the sustainability context in which the University operates and the principle of stakeholder inclusiveness;
- Prioritisation of aspects to be considered and related indicators;
- Validation of material aspects and related indicators in accordance with the principle of completeness;
- Review of the path to innovate the process with a view to ensuring consistency, continuity and improvement, based on the aspects that emerged from discussions with the governing bodies and focus groups.

This path is summarised in the materiality table, in which each dimension of sustainability is associated with the corresponding strategic priority and the relevant material topic. This is linked to the GRI Standards deemed most suitable to measure the impacts related to those aspects. The table also identifies the internal and external stakeholders of reference.

Table 1 – Materiality

Dimension	Scope	Description	GRI	Stakeholders
ECONOMIC	Teaching and student community	Expand actions to support the right to higher education and availability of student accommodation	GRI 201: Economic performance GRI 202: Market presence GRI 203: Indirect economic impacts GRI 204: Procurement practices	Students, Sponsors, National, regional and local institutions, Families
	Research	Increase participation in competitive calls		Scientific communities, Teachers, International networks
0 0		Foster local development and build on local expertise		Families, National, regional and local institutions, Businesses
Ш	Society	Promote fundraising		
		Enhance entrepreneurship and technology transfer		
	People	Semplificare i processi, anche mediante la trasformazione digitale		Teachers, Professional staff, Students and Families
<u>ب</u>		Improve energy efficiency	GRI 301: Materials	National manipul
ENVIRONMENTAL	Society	Facilitate low environmental impact mobility GRI 303:	GRI 302: Energy GRI 303: Water and effluents (2018)	National, regional and local institutions, Students, Families, Businesses, Scientific
		Promote efficient environmental management models and the circular economy	GRI 304: Biodiversity GRI 305: Emissions	communities
	People	Improve safety and accessibility of buildings and spaces	GRI 306: Waste GRI 308: Supplier environmental assessment	Students, Teachers, Professional staff
		Enhance the University assets and real estate		

Dimension	Scope	Description	GRI	Stakeholders
	Teaching	Reduce dropout rates and support timely student career progression by improving services	GRI 401: Employment GRI 402: Labour/ management	Students, Teachers,
		Improve student sociability and engagement in academic life		
	and student community	udent Ensure innovative teaching and professional training and promote graduate employment relations GRI 403: Occupational health	Sponsors, International networks	
		Reinforce international teaching	and safety (2018) GRI 404: Training and education GRI 405: Diversity and equal opportunity GRI 406: Non- discrimination GRI 407: Freedom of association and collective bargaining GRI 408: Child labour GRI 409: Forced or compulsory labour GRI 410: Security practices GRI 411: Rights of indigenous peoples GRI 413: Local communities GRI 414: Supplier social assessment GRI 415: Public policy GRI 416: Customer health and safety GRI 417: Marketing and labelling	
		Protect freedom and autonomy of research		
Ļ	Research	Strengthen the quality of research and of research facilities and equipment		Teachers, Businesses, Scientific communities, National, regional and local institutions
SOCIAL		Develop PhD programmes and expand career opportunities		
SS		Reinforce biomedical research and its engagement in the networks of care		
		Monitor the social impact of research		
	Society	Ensure quality and transparency of all information		National, regional and local institutions,
		Enhance the role of the University of Bologna as a safe and welcoming place		
		Strengthen integration with the Italian Health Service by improving the effectiveness of care models and health policies		Students, Families, Sponsors, Businesses
		Encourage dialogue with schools		

Dimension	Scope	Description	GRI	Stakeholders
		Expand public engagement initiatives	GRI 401:	
	Society	Promote development cooperation	Employment GRI 402: Labour/	National, regional and local institutions, Students, Families,
		Enhance and promote the local cultural heritage	management relations GRI 403:	Sponsors, Businesses
		Increase international mobility of staff	Occupational health and safety (2018) GRI 404: Training	
		Value meritocracy and gender respect in recruitment	and education GRI 405: Diversity and equal	
SOCIAL	People	Enhance the role of people and improve occupational well-being	opportunity GRI 406: Non- discrimination GRI 407: Freedom of association and collective bargaining GRI 408: Child labour GRI 409: Forced or compulsory labour GRI 410: Security practices GRI 411: Rights of indigenous peoples GRI 413: Local communities GRI 414: Supplier social assessment GRI 415: Public policy GRI 416: Customer health and safety GRI 417: Marketing and labelling	Professional staff, Teachers







€957
million
ECONOMIC VALUE
ATTRACTED



€805 million ECONOMIC VALUE DISTRIBUTED



17% GREEN PROCUREMENT



€366,795 5X1000 In 2023, the **University's Financial Statements** showed a profit of €68 million, with sufficient reserves to adequately support future operations and the implementation of strategic planning.

3.1 ECONOMIC VALUE ATTRACTED

The economic value attracted for the year 2023 is €957 million (operating, financial and extraordinary income), 54% of which contributed by the State.

Table 2 - Economic value attracted

Economic value attracted	2023 (€m)	%
Contributions from students	132	14%
Contributions from the State	639	67%
of which FFO	516	54%
Contributions from the Regions	5	1%
Contributions from the EU and the rest of the world	8	1%
Contributions from others	37	4%
Income from sponsored research and technology transfer	14	1%
Income from research	95	10%
Other income	27	3%
Total	957	100%

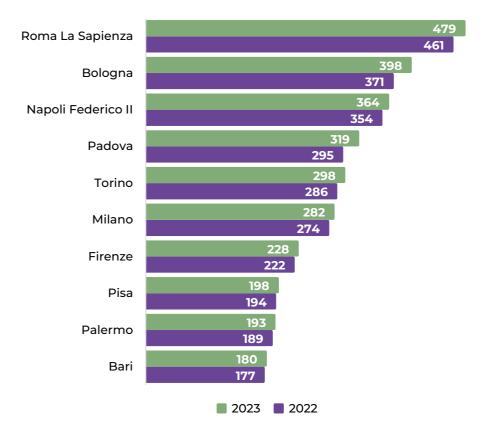
Figure 2 – Economic value attracted (€m)



Fund for the ordinary financing of Italian universities

The Ordinary Financing Fund (FFO) is the main public financing instrument for Italian universities. Every year, the Italian Ministry of University and Research allocates the Fund to universities based on historical, size and performance criteria. The benchmark shown in the figure only takes account of the main FFO items (basic, performance-based and adjusted portion).

Figure 3 – FFO 2022-2023 (€m)



Fundraising and donation campaign

In its 2022-2027 Strategic Plan, the University has set a specific fundraising goal and planned dedicated actions, which in 2023 raised approximately €5.6 million (€4.7 in 2022).

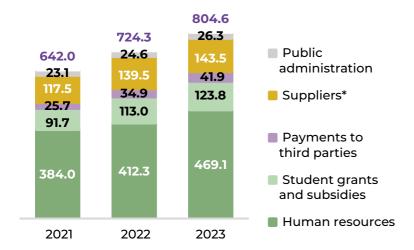
3.2 ECONOMIC VALUE DISTRIBUTED

The University distributes the value created during the year directly and indirectly to its stakeholders. The main recipients include the teaching and research staff and professional staff, the student community that benefits from services and scholarships, the research partners that act as project coordinators, the suppliers that provide goods and services, the financial intermediaries for interest payable on loans, and the public administration, through the payment of direct and indirect taxes.

Table 3 – Economic value distributed

Economic value distributed	2023 (€m)	%
Human resources	469	58%
of which Teaching and research staff	331	41%
of which Managers and Professional staff	138	17%
Student grants and subsidies	124	15%
Payments to third parties	42	5%
Suppliers	141	18%
Loan capital	2	0%
Public administration	26	3%
Total	805	100%

Figure 4 – Value distributed (€m)



A portion of the economic value generated (€153 million in 2023) is not distributed, but retained internally. This relates to amortisation and depreciation, provisions, other operating expenses and operating profit.

Table 4 - Economic value retained

Economic value retained	2023 (€m)	%
Amortisation, depreciation and write-downs	40	26%
Provisions for risks and charges	15	10%
Other operating expenses	30	19%
Operating profit	68	45%
Total	153	100%

Procurement policy

The University purchases goods and services in compliance with EU directives and the Italian Public Contract Code. Procurement contracts include a social clause, which allows the hiring of personnel already employed under current contracts. Bids are checked for compliance with the requirements, taking the cost of personnel according to the most representative collective bargaining agreements into account. With regard to the protection of employees, invoice payments are only made after confirming that the contractors have met their social security obligations pursuant to the applicable law. Environmental sustainability in the procurement of goods and services is ensured by requiring compliance with the Minimum Environmental Criteria (CAM) dictated by ministerial decrees.

Green procurement

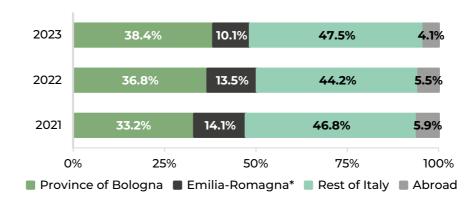
The University Strategic Plan encourages green public procurement, an approach whereby public administrations integrate environmental criteria into all phases of the purchasing process. The incidence of green procurement on costs incurred for goods and services in 2023 is 17% (16% in 2022, the 2024 target is 18%).

^{*} Suppliers include Loan capital.

Geographical origin of suppliers

In 2023, 48.5% of turnover derived from suppliers based in Emilia-Romagna, pouring over €70 million into the Region where the University sites are located.

Figure 5 – Geographical origin of suppliers





-12.77PROMPT
PAYMENT RATE 2023

Prompt payment

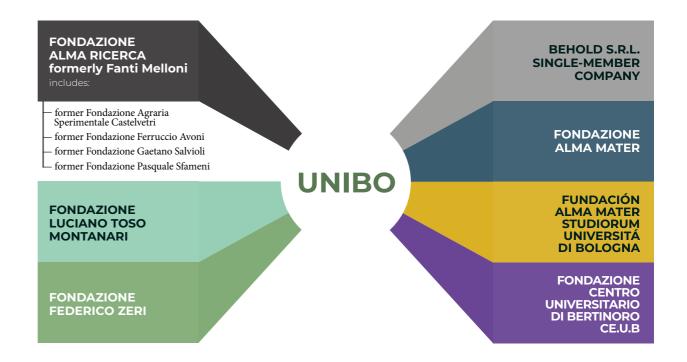
The University's indicator in 2023 is -12.77; this means that, on average, the University pays purchase invoices from its suppliers almost 13 days in advance of their due date.

^{*} Excluding the province of Bologna.

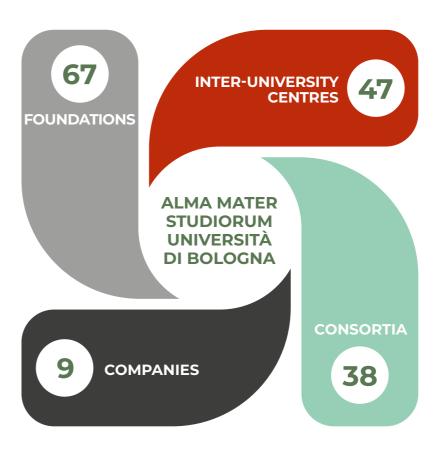
3.3 ECONOMIC VALUE OF THE UNIBO GROUP

The University of Bologna is the parent company of the Unibo Group, which is formed by those organisations and businesses in which the University holds an interest and influences the decision-making process. The <u>Consolidated Financial Statements</u> of the Unibo Group present the global economic value of all these entities.

In 2023, the Unibo Group consisted of the following entities:



In addition to the entities that form part of the Unibo Group, there are other organisations in which the University of Bologna holds an interest, which were as follows as at 31 December 2023:



As far as Companies are concerned, three of them were established with funding from the NRRP. As far as Consortia are concerned, 32 are inter-university consortia and six were established by the University with private entities. Of the 67 Foundations, one is based at the University, two have the same Board of Governors as the University, three are owned by Public Bodies and 17 were established with funding from the NRRP and the CNP.









J12
DEGREE
PROGRAMMES
AT VARIOUS LEVELS
OF WHICH 51 PHD
PROGRAMMES



87,865
STUDENTS ENROLLED
IN DEGREE
PROGRAMMES AT
VARIOUS LEVELS IN
2023



8,060
INTERNATIONAL
STUDENTS
ENROLLED



19,783
GRADUATES FROM
DEGREE
PROGRAMMES AT
VARIOUS LEVELS



13,180 SCHOLARSHIPS FOR STUDENTS (FUNDED BY ER.GO)



81.2% REGULARLY ENROLLED STUDENTS

4.1 TEACHING, QUALITY AND INNOVATION

The University of Bologna offers a wide variety of university education programmes, which can be accessed after graduating from upper secondary school. These include Bachelor (first cycle) and Combined Bachelor and Master degree programmes, two-year Master degree programmes (second cycle), and PhD programmes and Specialisation Schools (third cycle). In addition to these traditional cycles, further opportunities are available in between cycles, such as first-level and second-level professional master's programmes, postgraduate programmes, lifelong learning programmes and intensive courses.

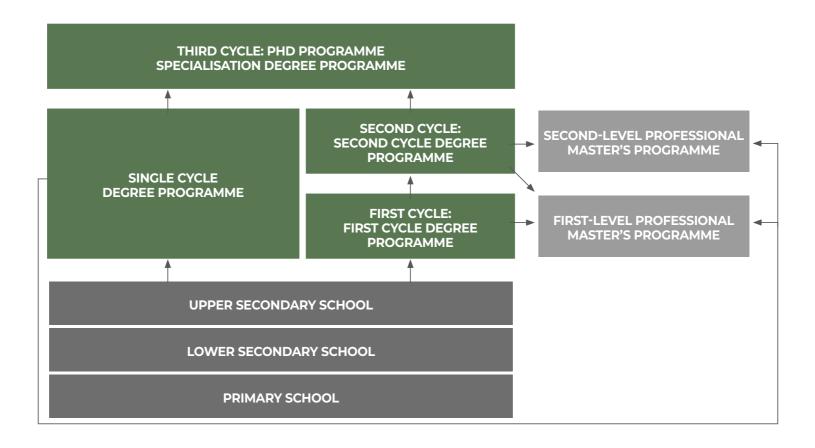


Table 5 – 2023/24 Multicampus programme catalogue

Programmes, students enrolled and graduates	Bologna	Cesena	Forlì	Ravenna	Rimini
First cycle and single cycle degree programmes	79	10	9	11	9
Second cycle degree programmes	102	9	12	8	11
Total degree programmes	181	19	21	19	20
of which: double degrees	31	3	8	7	-
PhD programmes	46	1	3	1	1
	78	1	3	4	-
Postgraduate programmes	26	-	1	1	-
Students enrolled in the first year	19,443	1,528	2,414	1,163	1,522
Students enrolled	67,431	4,976	6,672	3,980	4,806
of which: second cycle degree programmes	17,912	1,260	1,783	819	1,283
of which: double degrees	14,122	338	1,491	482	-
Graduates*	14,836	1,138	1,774	734	1,301

^{*} The figures refer to the calendar year 2023.

Programme catalogue

Table 6 - Programmes offered

Programmes	2021/22	2022/23	2023/24
First cycle degree programmes	97	101	104
Second cycle degree programmes	132	137	142
Single cycle degree programmes	14	14	14
Specialisation schools	56	59	59*
PhD programmes	48	51	51
Professional master's programmes	91	94	86 ^{**}
Postgraduate programmes and lifelong learning programmes	24	32	28**

^{*} Provisional figure.| ** The figure includes the programmes offered or scheduled to be offered as at April 2024.

In 2023/24, 26,000 students enrolled in the first year at our University. A slight variation was noted compared to the previous year, i.e. -3.6% in first cycle degree programmes (LM, +1.7% in second cycle degree programmes (LMCU).

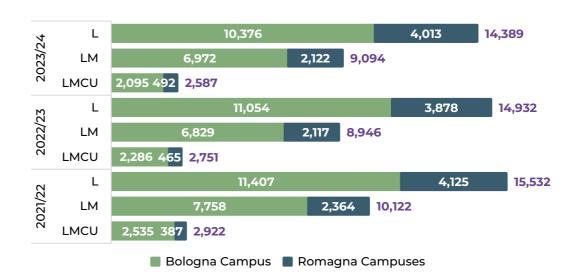


Figure 6 – Students enrolled in the first year

The overall number of students exceeds 87,800, 56% of whom enrolled in first cycle degree programmes, 26% in second cycle degree programmes, and 17% in single cycle degree programmes.

Figure 7 – Students enrolled in first cycle, second cycle and single cycle degree programmes

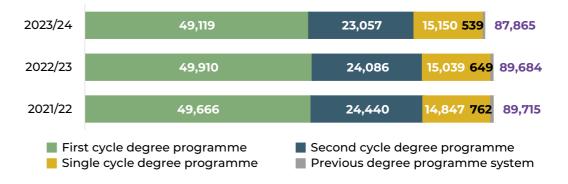
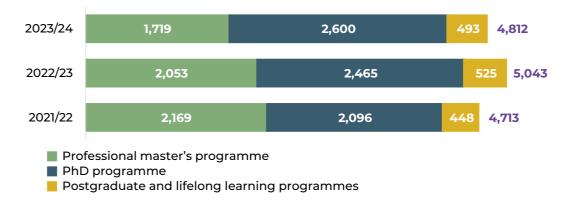


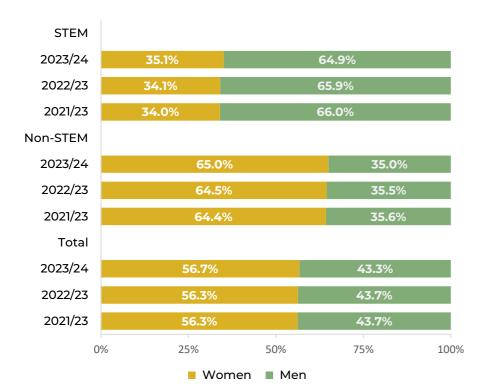
Figure 8 – Students enrolled in professional master's programmes, PhD programmes and postgraduate programmes



Starting from the 2023/24 academic year, the University has expanded its programme catalogue with the Transferable Skills Plan for PhD students, focusing on the following areas: enhance and communicate research; methods, techniques and tools; design one's own future. Ten initiatives were offered in 2023, totalling 15 editions and 1,275 places available.

As in the previous two-year period, the prevalence of female students, accounting for 56% of the total, was confirmed in 2023/24 too.

Figure 9 – Breakdown of students by gender (first, second and single cycle degree programmes)



The figures relating to geographical origin confirm the University of Bologna's attractiveness: 50.5% of those who enrolled in 2023/24 live outside Émilia-Romagna.

Figure 10 – Students by region of residence

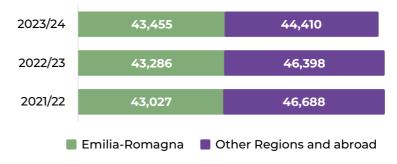
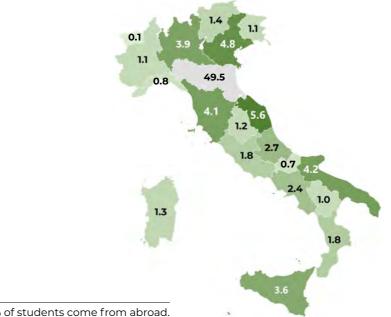
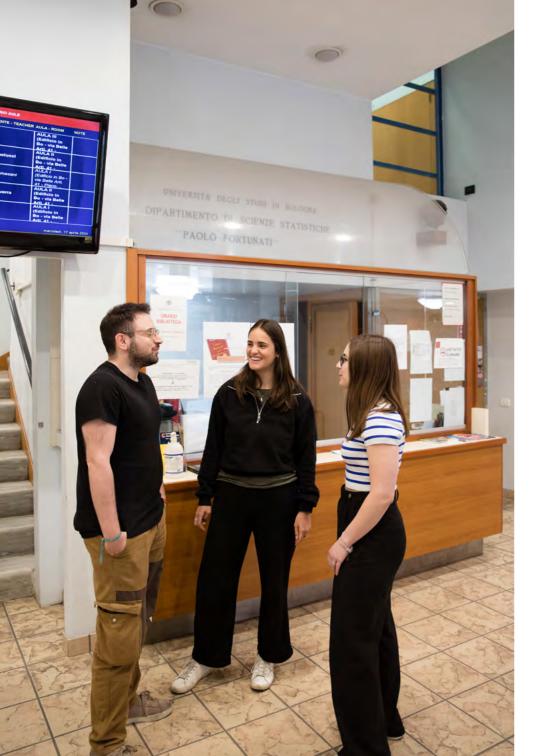


Figure 11 – Students by region of origin (Italy heat map; percentages)

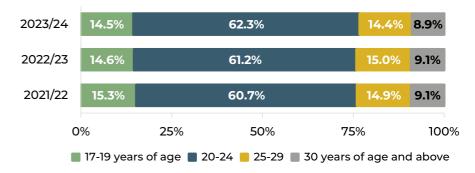


⁵ 7% of students come from abroad.



76.8% of students are under 25 years of age and the number of students aged 25 and over is decreasing.

Figure 12 - Age of students



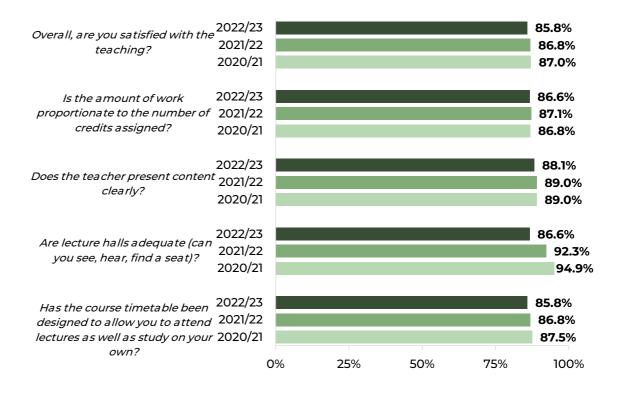
The figure relating to on-time graduation shows an increase in students 'fuori corso' (past the envisaged completion time for the degree programme), which went from 18.5% in 2022/23 to 18.8% in 2023/24.

The dropout rate, after increasing in 2021/22, decreased again in 2022/23.

Teaching quality

Surveys reveal widespread satisfaction of attending students with the various aspects of the learning activities taken into consideration. In the 2022/23 academic year, around 86% of students expressed positive feedback, with no substantial difference across the Campuses.

Figure 13 - Positive feedback on teaching



Teaching innovation

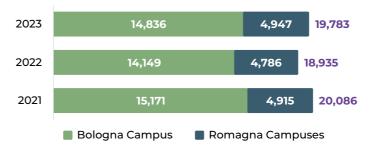
The University of Bologna stands out for its commitment to teaching innovation, in line with international standards such as the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). The University pursues a student-centred teaching approach, encouraging the acquisition not only of disciplinary knowledge, but also of transferable and strategic skills. This is supported by flexible learning paths supplemented with new teaching methods and digital tools. Teachers act as facilitators of learning.

The Teaching and Learning Centre plays a key role in promoting teaching innovation. Two experimental models are in place: the Hybrid model, which integrates teaching innovations for a portion up to 35% of the programme, and the DDI – Integrated Digital Teaching model, which uses a repository of resources to support students in learning and exam preparation. These forms of innovation make the most of new technological devices in order to support the learning paths of both attending and non-attending students, thus reducing, through both models, the opportunity gap between the two groups. As a whole, 519 learning activities joined the trial in 2023. A training plan for the development of Transferable Skills in PhD students was also launched, involving 862 participants in the courses on offer.

Graduates and employment status

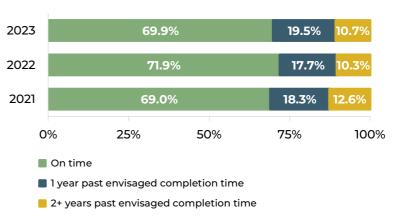
Il numero di laureati e laureate complessivo per l'anno solare 2023 ha visto un leggero aumento registrando 19.783 unità.

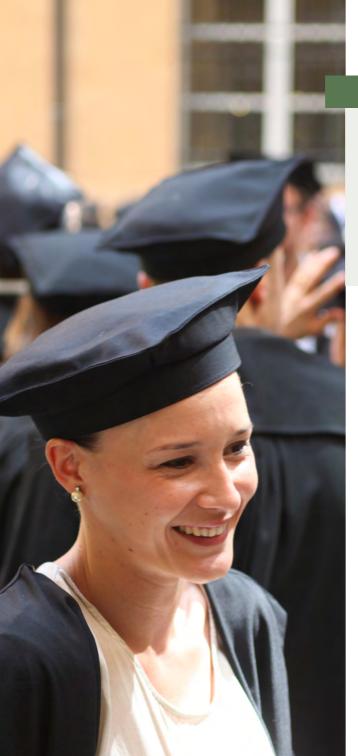
Figure 14 - Graduates



The percentage of those who completed their studies on time stood at 70%. One student in ten was 'fuori corso' (past the envisaged completion time for the degree programme) by at least two years. Final grades also tended to increase in the three-year period: the percentage of those graduating with final grades higher than 105 rose from 50.4% in 2021, to 53.3% in 2022, to 54.4% in 2023.

Figure 15 - Time of graduation





HONORARY DEGREES AND HONORARY PHD DEGREES

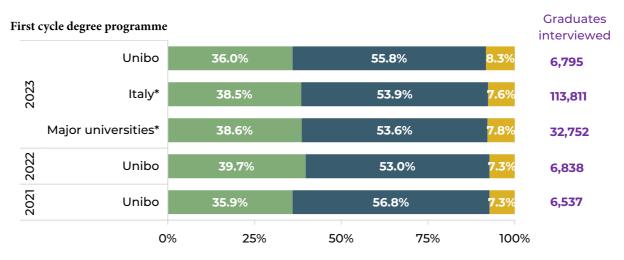
To date, the University of Bologna has awarded over 600 honorary degrees to illustrious Italian and foreign personalities from the national and international worlds of science, art, politics, religion and civil society. Just as many honorary degrees have also been awarded in memory of students who lost their lives at war. Since 2017, the University awards honorary PhD degrees to those who stand out in various areas of academic interest.

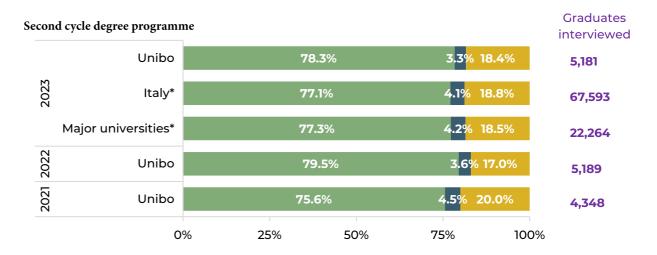
In 2023, among others, an honorary degree was conferred on:

- Alberto Vacchi in Engineering Management;
- Luigi Lai in Music and Theatre Studies;
- Liliana Segre in International Relations;
- Maurizio Reggiani in Mechanical Engineering.

The employment status of first-level graduates from the University of Bologna shows a slightly lower value in comparison with Italian graduates and graduates from major universities (36% University of Bologna, 38% Italy and major universities). The situation is reversed for second-level graduates (78% University of Bologna, 77% Italy and major universities).

Figure 16 - Employment status one year after graduation

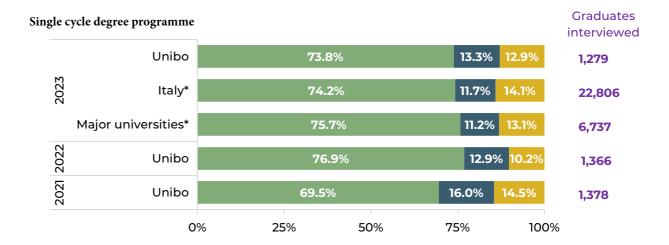




Employed

Not employed but in postgraduate education (unpaid)

Neither employed nor in postgraduate education



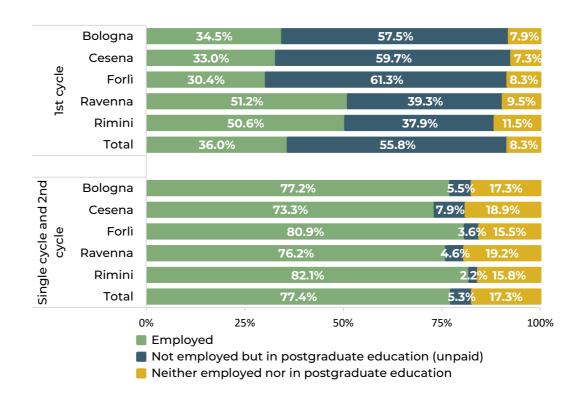
Source: AlmaLaurea – 2023 Employment Status Survey.

Postgraduate education includes: for graduates from a first cycle degree programme, second-level degree programme, internship/practical training, specialisation school or first-level professional master's programme; for graduates from a second cycle or single cycle degree programme, internship/practical training, PhD programme, specialisation school, or first-level or second-level professional master's programme.

^{*} No. 75 Italian universities involved. Italy's major universities are: Bologna, Milano, Napoli Federico II, Padova, Roma Sapienza and Torino.

One year after graduation, the distribution according to employment status varies across Campuses; however, the degree programmes on offer at each Campus should be taken into account, since a person's chances of employment also depend on their degree.

Figure 17 – Employment status one year after graduation by Campus



Source: AlmaLaurea – 2023 Employment Status Survey.



MED3 e-learning per l'ecm





Postgraduate education centres

Collegio Superiore

The Collegio Superiore and the Institute of Advanced Studies are part of the University's Institute for Higher Studies (ISS), an interdisciplinary and international centre of excellence involved in all levels of education and research. During 2023, 330 hours of curricular lectures and seminars and 45 hours of international conferences were offered. The Collegio further enhances the University's cultural offer by organising seminars intended for the student community, the teaching staff and the general public.

Consortium Med3 - Continuing Medical Education

Med3 is a non-profit consortium composed of the University of Bologna, CINECA Consorzio Interuniversitario (Inter-university Consortium), four Local Health Authorities in Emilia-Romagna, and Montecatone R.I. SPA. It aims to design, develop and market e-learning courses and hybrid learning courses in the field of Continuing Medical Education (CME). In addition to hosting classes, the University of Bologna plays a leading role in directing and designing innovative CME models.

University Residential Centre of Bertinoro

Since 1994, the University Residential Centre – C.e.U.B., located in the monumental area of Bertinoro, has been active in the field of postgraduate education and in the planning of conferences of national and international significance.

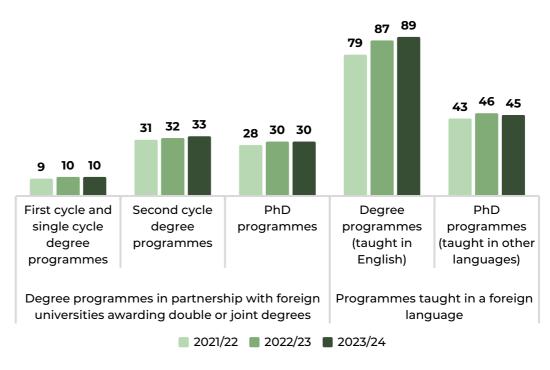
Bologna Business School

Since 2014, the Bologna Business School (BBS) has been involved in postgraduate and post-experience manager training. Every year, its professional master's and training programmes attract some 1,600 students from 103 countries around the world.

4.2 INTERNATIONALISATION OF TEACHING

The University of Bologna offers a wide range of international degree programmes that welcome international and Italian students and provide them with tutoring and support. These services aim to foster integration and develop appropriate skills for international work environments. Students can enrol in degree programmes taught in Italian or in a foreign language and receive a double, multiple or joint degree. The programme catalogue has expanded slightly over the past three years.

Figure 18 – International degree programmes



The number of international students has grown over the last three years and exceeded 8,000 in 2023/24, i.e. 9.2% of the total number of students enrolled in the first and second cycles. International PhD students are the most numerous and growing, reaching 18.5% in 2023/24. EU countries include the 27 Member States of the European Union.

Figure 19 – Breakdown of first and second cycle students by origin

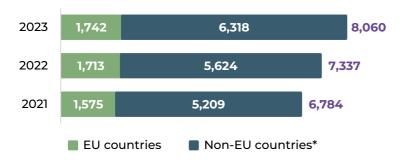


Figure 20 - Breakdown of PhD students by origin

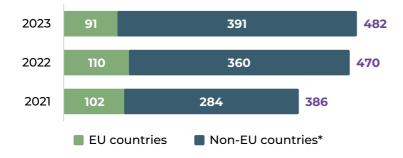
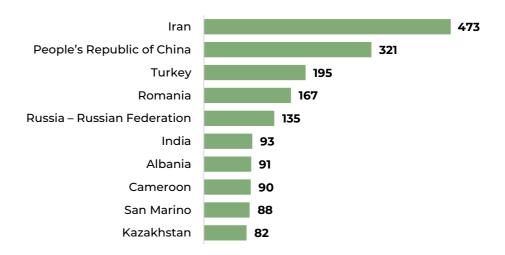


Figure 21 – New careers (2023/24) by country of origin



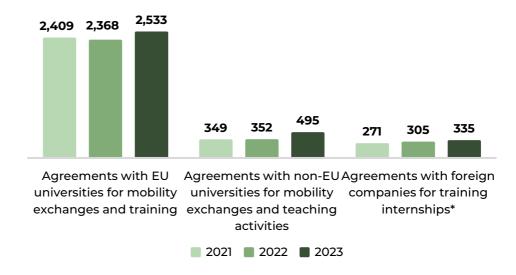
The ability to welcome all and protect everyone's rights is confirmed by the presence of 473 Iranian students.

^{*} Except San Marino.

International mobility

In 2023, the University actively participated in various international mobility programmes, including Erasmus+, Overseas and exchanges with the Representación en la República Argentina. These initiatives are made possible by agreements that aim to enhance institutional, academic, scientific and teaching relations with partner universities worldwide.

Figure 22 – Agreements in force



These agreements facilitate student mobility for teaching activities and/or internships abroad, ensuring that those experiences are recognised and integrated into one's study plan.

^{*} The figure refers to the number of agreements in force with foreign companies/organisations for incoming and outgoing mobility.

Figure 23 – Student mobility

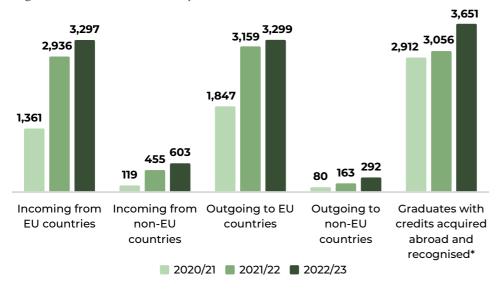
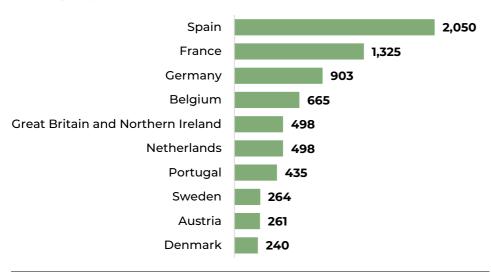


Figure 24 – Outgoing students by country of destination (top 10 countries – three-year period 2021-2023)



^{*} The figure refers to the calendar years of the three-year period 2021-2023.



Figure 25 – Incoming students by country of origin (top 10 countries – three-year period 2021-2023)

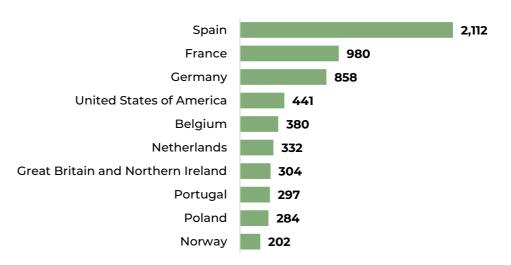
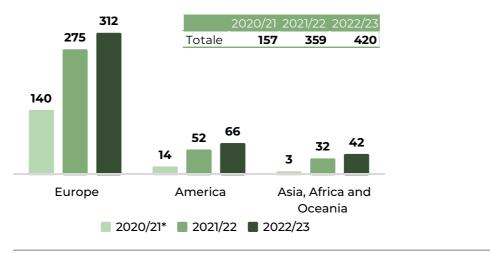


Figure 26 - Scholarships for dissertation abroad



^{*} For these academic years the decline in the number of scholarships was caused by the restrictions imposed by the pandemic.



University Language Centre and language courses

The University Language Centre (CLA) provides language services to students, teachers and professional staff. The services on offer include foreign language and Italian as a second language courses, as well as language proficiency tests.

With regard to Italian as a second language, in 2023 the CLA ran 92 courses and 24 tutor-assisted self-study pathways, both in person and online. These are mostly intended for incoming exchange students (Erasmus, Erasmus Mundus, Overseas, etc.), as well as for international students enrolled in degree programmes, single course units, professional master's programmes and PhD programmes.

With regard to foreign languages, in 2023, the CLA offered blended modules and fee-based courses for preparing for proficiency tests, including specifically for level B2, and a call for applications was published to offer students a grant to obtain language certificates recognised by the CLA. Online academic English courses intended for PhD students and teachers and English literacy courses for professional staff were also on offer.

Figure 27 - Foreign language courses

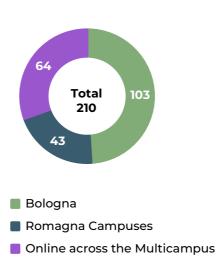


Figure 28 – Students enrolled in foreign language courses

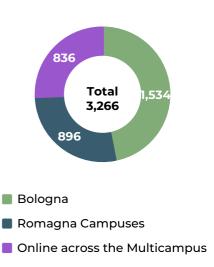




Figure 29 – Italian language courses

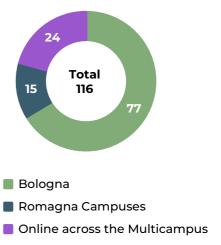
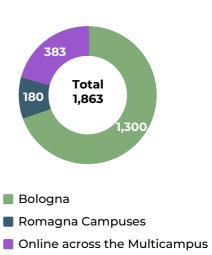


Figure 30 – Students enrolled in Italian language courses



4.3 MEDICAL TEACHING AND RELATIONS WITH THE ITALIAN HEALTH SERVICE

Medical teaching at the University of Bologna is closely intertwined with clinical care activities and supported by two so-called Observatories set up by the Emilia-Romagna regional authority (Regione Emilia-Romagna) to monitor and improve the quality of training – the **Observatory for Specialist Medical Training** and the **Observatory for Nursing, Technical, Rehabilitation and Prevention Professions**. The main structures that liaise with the health authorities are the Department of Biomedical and Neuromotor Sciences and the Department of Medical and Surgical Sciences. Medical teaching is mainly carried out at:

- The IRCCS University Hospital, which is the reference centre for relationships with the Italian Health Service
 and the main professional internship location for most degree programmes and specialisation schools in the
 medical field;
- The IRCCS IOR (Rizzoli Orthopaedic Institute), which is an additional location for orthopaedic research and teaching;
- The IRCCS ISNB (Institute of Neurological Sciences, part of the Bologna Local Health Authority), which is the reference facility for activities related to neurological sciences;
- The Bologna Local Health Authority, which supports various teaching and research activities, in areas such as anatomical pathology and psychiatry, and contributes to internship activities for health professions degree programmes and specialisation schools;
- The Romagna Local Health Authority, which supports teaching activities for the degree programmes in Medicine and Surgery at the Campuses of Forlì and Ravenna, as well as those for health professions degree programmes and several specialisation schools.

In order to ensure integration between regional healthcare and the University's teaching, training and research activities, joint planning procedures are in place, involving over **4,000 students** in the **Medicine and Surgery** degree programmes, in addition to **2,700 students** in **Health Professions** degree programmes and 383 University **staff members in a partnership agreement** with the Emilia-Romagna Regional Health Service. Emilia-Romagna has a regional memorandum of understanding in place, concerning specialty training of Medicine and Surgery graduates, which sets out the core elements of training for students in medical specialisation schools. In 2023, in spite of the ongoing shortage of specialist medical doctors in essential fields for the Italian Health Service, the percentage of new contracts for medical doctors in specialty training remained well above the national average, testifying to the quality of the programmes on offer. As a whole, in 2023 (2022/23 academic year), the total number of **medical doctors in specialty training (2,401)** in **45 specialisation schools** increased again compared to the previous year, confirming the upward trend in **specialty training contracts (463** students enrolled in the 2022/23 academic year). This is a consequence of **ministerial scholarships (518)** and of the investment made by Regione Emilia-Romagna, which confirmed the allocation of **28 additional specialty training contracts** in 2023. For students enrolled in medical specialisation schools, the University of Bologna has created a training network involving over 40 Local Health Authorities and organisations across the country with more than 300 operational units.

4.4 STUDENT COMMUNITY SERVICES

Guidance for prospective students

Guidance for prospective students targets:

- upper secondary school students and those who wish to enrol in university to help them better understand their skills, motivations and professional goals. The aim is to support them in choosing their degree programme by providing detailed information about the programme catalogue, services and opportunities available;
- students willing to continue their university studies by enrolling in a second cycle or single cycle degree programme.

The service also caters for international prospective students, actively cooperates with the Multicampus structures and works in close collaboration with delegates for guidance and internal coordinators. Guidance activities include:

- Guidance interviews for upper secondary school students and those interested in enrolling in a degree programme. In 2023, 312 interviews were conducted;
- Meetings at upper secondary schools in the local area of each Campus and, on request, in other provinces too, including at international and foreign schools. In 2023, **85 meetings** were held;
- Online and/or in-person presentations of the degree programmes and admission methods, including webinars and open days, also in English. In 2023, **157 presentations** were carried out;
- University-wide and Campus-specific, online and in-person guidance events for prospective students, where the services and programme catalogue on offer are presented, sometimes also in English. In 2023, **7 events** were held:
- Information via the myAlmaOrienta app, which was downloaded by **26,697 users** in 2023;
- Initiatives for third-, fourth- and fifth-year secondary school students, as well as for teachers, within the Paths for educational and career guidance and for the acquisition of transferable skills (PCTOs), the Plan for Science Degrees (PLS) and the Guidance and Tutoring Plans (POTs). In 2023, 145 agreements were signed.

Table 7 – Guidance for prospective students

Events and participants	2023
In-person and online presentations at Italian and foreign upper secondary schools	85
No. of participants	10,024
In-person and online programme-specific presentations	157
No. of participants	14,800
Guidance events for prospective students	7
No. of participants	23,460
No. of agreements with schools for PCTOs	145
No. of PCTOs on offer	456
No. of students involved	6,770
University stands at in-person or online international guidance events	9
No. of participants	1,078



Tuition fees and waivers

To enrol in the University, students are required to pay <u>tuition fees</u>. Each university may set the amount of these fees independently, subject to the provisions of Law 232/2016. This envisages that tuition fees are to be quantified on the basis of the financial circumstances of each student and their families, as documented in their ISEE Certification. The ISEE is an indicator calculated by the Italian National Institute for Social Security (INPS) using income and asset information disclosed by both the Italian Revenue Agency and applicants themselves. This information also includes the composition of the applicant's household. The law further provides for a full tuition fee waiver, called 'no-fee area', for economically disadvantaged students who have an ISEE indicator under a certain threshold and who have earned 10 CFU credits (for students enrolling in the second year) or 25 CFU credits (for students enrolling in subsequent years).

The CFU credits in question must be acquired in the 12 months before the date of 10 August preceding enrolment.

Since the 2017/18 academic year, the University of Bologna has applied and progressively improved a very inclusive fee system.

In particular, the **no-fee area** is wider than the minimum required by law (the ISEE threshold for the 2023/24 academic year is €27,000.00) and the tuition fee calculation method is especially advantageous for students whose ISEE exceeds the no-fee area threshold, but is still low or medium-low. Significant fee reductions are also granted to those who fail to meet the merit requirements provided for by law in order to be included in the no-fee area.

Since the 2022/23 academic year, international students from certain non-EU countries are charged <u>flat tuition fees</u>, i.e. are required to pay a reduced fixed fee irrespective of their financial circumstances. Beside lowering tuition fees, this measure allows saving costs associated with submitting the necessary documentation for fee calculation. In the 2023/24 academic year, **2,044** students benefitted from this measure.

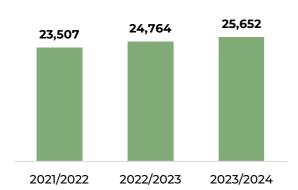
The distribution of the student population by equivalent financial status indicator (ISEE), as declared, is presented below.

Table 8 – Student distribution by ISEE

2021/2022	2022/2023	2023/2024
13.00%	12.74%	12.76%
14.10%	14.38%	14.81%
2.01%	2.06%	2.10%
3.05%	3.13%	3.37%
6.29%	6.29%	6.75%
8.39%	8.64%	9.43%
4.53%	4.74%	5.59%
0.78%	0.88%	1.22%
0.64%	0.71%	0.90%
47.22%	44.08%	40.39%
	2.35%	2.67%
	13.00% 14.10% 2.01% 3.05% 6.29% 8.39% 4.53% 0.78% 0.64%	13.00% 12.74% 14.10% 14.38% 2.01% 2.06% 3.05% 3.13% 6.29% 6.29% 8.39% 8.64% 4.53% 4.74% 0.78% 0.88% 0.64% 0.71% 47.22% 44.08%

Students may also be granted other full or partial tuition fee waivers in connection with certain personal or family circumstances. These include a tuition fee reduction for students who only have to sit the final examination, which was introduced in the 2022/23 academic year. The measure is designed for economically disadvantaged students and provides for a flat fee of \in 500 if the student graduates by 30 September (or 30 November for health professions degree programmes) or \in 1,000 if the student graduates by 31 December.

Figure 31 – Full waivers



Scholarships and funding opportunities

Financial aid supporting the **right to higher education** is managed by both Regione Emilia-Romagna, through the **Regional Authority for the Right to Higher Education** (ER.GO), and the University of Bologna. The two institutions have been cooperating for a long time in the management of the benefits and services for which they are responsible, based on a partnership agreement that optimises the resources available and enables an efficient management of procedures involving many students. ER.GO is tasked with acquiring the financial documentation concerning those who apply for financial aid, also granted by the University, such as the calculation of tuition fees. The University, on the other hand, makes sure that the applicable merit requirements are met by checking the students' careers, also for benefits granted by ER.GO. Under the partnership agreement, some calls for applications and guidance activities are managed jointly by the two institutions.

ER.GO offers a wide range of financial benefits to students who meet specific requirements linked to their financial status and academic merit. Among these, scholarships represent the most substantial benefits. Their amounts vary according to the student's income (ISEE and ISPE), whether they live in the city, live away from home, or live at home and commute, and for female students enrolled in STEM degree programmes (Science, Technology, Engineering and Mathematics). In the 2022/23 academic year, 13,180 students were awarded scholarships. Other benefits include accommodation in halls of residence, meal vouchers at canteens and partner establishments, and international mobility aid.

The University offers other benefits, such as <u>scholarships for part-time (150-hour) student collaborations</u>; recipients may receive up to €1,125 to carry out activities in support of student services. In the 2022/23 academic year, 2,202 of these **grants** were allocated.

Each year, the University of Bologna publishes calls for applications to award scholarships to disadvantaged students – be it a financial, physical, psychological, social or family disadvantage that could jeopardise their academic results. These scholarships are awarded on a case-by-case basis and priority is given to those who have not received any other financial aid under the law on the right to higher education. Since the 2017/18 academic year, the University and ER.GO have implemented an additional joint measure, which includes not only financial aid, but also tuition fee waivers and support services. In the 2022/23 academic year, an extraordinary measure in support of students affected by the floods that hit some areas of Emilia-Romagna in May 2023 was implemented. As a whole, in the 2022/23 academic year, 553 students took advantage of these grants.

The experimental support measure allocating **financial aid** of varying amounts to students with special needs was made available in 2023 too. These funds enable **students with disabilities or specific learning disorders** (**SLD**) to purchase aids to compensate for any difficulties they face in university life. Since the aim is to ensure a good level of autonomy, requests concern the acquisition of both technological devices and personal care services.

Additional scholarships and tuition fee waivers for international students are envisaged as part of merit-based schemes, covering students enrolled in second cycle degree programmes who were awarded a first cycle degree by the University of Bologna on time and with final grade 110/110. These measures fall within the scope of support policies for special student categories, such as the <u>Unibo for Refugees</u> project and the <u>International Talents@Unibo</u> scholarships to attract foreign students.

Merit-based schemes have long included a tuition fee waiver strictly based on merit, applicable to students enrolled in second cycle degree programmes who were awarded a first cycle degree by the University of Bologna on time and with final grade 110/110. In 2022/23, 512 students benefitted from this measure.

In 2023, **615** <u>tutoring fellowships</u> were granted to students enrolled in second cycle degree programmes or in the last two years of single cycle degree programmes. Tutors provide valuable support to students during their university years. The University's tutors welcome new students in Schools, degree programmes, halls of residence and internships, and provide services for students with disabilities or SLD.

Table 9 – Funding opportunities

Benefits	2020/21	2021/22	2022/23
Tuition fee waivers	43,108	46,578	47,900
of which: full	22,192	23,507	24,817*
of which: partial	20,916	23,071	23,083
Scholarships funded by ER.GO	14,404	12,662	13,180
Part-time (150-hour) collaborations	2,374	2,347	2,202
Measures for economically disadvantaged students	420	431	553
Grants for aids for students with disabilities and SLD	124	75	85
Merit-based grants	450	450	**
Tutoring fellowships	1,009	762	615
Tutoring contracts	2,356	2,658	2,824
Accommodation	1,852	2,127	2,208
of which: Romagna Campuses	232	232	337
Fiduciary loans	-	-	6

^{*} Including 53 waivers granted for the floods pursuant to Decree-Law 61/2023.
** The measure was not implemented.

Housing services

The University is aware of the difficulties faced by students away from home in finding accommodation, which is why it continues to collaborate with municipal authorities, ER.GO and other local actors to find solutions. ER.GO manages a total of **29 halls of residence** (21 in Bologna, three in Cesena, two in Forlì, two in Rimini and one in Ravenna), access to which is reserved for students away from home based on specific merit and financial criteria set out in the calls for applications.

Also in 2023, the University funded a <u>rent subsidy</u> to allocate 600 grants of €1,000 each to students away from home who have an ISEE \leq €28,000.00 and an ISPE \leq €62,000.00.

Since 2022, **agreements** are in place with the Romagna sponsors that give students on the ER.GO ranking lists access to the housing services offered by Fondazione Flaminia in Ravenna and Ser.In.Ar in Forlì. Moreover, UNI.RIMINI ensures support to students and researchers in training by covering housing costs through a call for applications managed by ER.GO.

Housing support

Thanks to a partnership with the Regional Directorate of the Italian Revenue Agency and the Bologna municipal authority (Comune di Bologna), the University set up a Tenancy Agreement Registration Desk (Sportello Registrazione Affitti) at the Right to Higher Education Unit. The desk offers advice and information on how to enter into a legal tenancy agreement. The desk is available on every Romagna Campus and provides support for the issue of the tax identification number.

Improving living and study conditions

The <u>Psychological Support Service for Young Adults</u> (SAP) is a free listening, guidance and counselling service for students who face emotional and relational problems or difficulties of various kinds during their university life. €350,000 were used for this service in 2023. In 2023, 1,200 requests (1,015 in Bologna and 185 in the Romagna Campuses) were submitted, up from 2022 (1,035) and from previous years (around 900 annually).

Around 3,200 counselling interviews were conducted in 2023, all of which were followed by a treatment period (individual or group psychotherapy).

The aim in 2023 was to expand the service reach, given the increase in requests from people experiencing anxiety, depression, psychological and emotional disorders.



The Service for Students with Disabilities and Specific Learning Disorders (SLD) provides guidance and support to persons with special needs, ensuring equal opportunities in learning. Specialist staff provide students with support from enrolment until completion of their studies at the University. The aim is to identify and design, together with each student, the necessary measures to study and take exams in the most effective way possible. Service satisfaction surveys show high user satisfaction: in 2023, the average satisfaction value was 4.03 (on a scale of 1-5).

The <u>alias career</u> allows students to be given a provisional identity for the entire duration of their academic career. After activating the alias career, the name chosen by the student will be used in their University badge, email address and all information systems. This service also offers support in dealing with ER.GO-related paperwork and access to University libraries. 75 alias careers were activated in 2023.

<u>Study services</u>. In Bologna, around the University, there are 16 study rooms open at different times, some of them also in the evening and during the weekend. Students can check real-time occupancy using the Affluences app. All information on the opening times, conditions for access and services available at each room is published on the <u>University website</u>. Many study rooms are open until 8.30 p.m. and also on holidays. Study rooms are available in Cesena (2), Forlì (4), Ravenna (7) and Rimini (2).

The University supports student initiatives by **offering funding to student associations** to organise their own cultural, recreational and sports activities. The updated list of Student Associations and Cooperatives accredited in 2023 is published on the University website.

Table 10 – Services for improving living and study conditions

Users, funding, associations and activities	2020/21	2021/22	2022/23
Students with disabilities	750	856	992
Users of the service for students with specific learning disorders	1,207	1,378	1,571
Funding for the purchase of aids for students with disabilities and SLD	124	75	85
Funding to Student Associations (€)	400,000	400,000	200,000*
No. of accredited Student Associations and Cooperatives	39	30	30
No. of activities carried out by Student Associations	174	235	229

The University of Bologna provides non-EU, EU and Italian students away from home with dedicated <u>health-care services</u>, including a general practitioner for medical examinations, a night/weekend emergency medical service and a dental clinic.

^{*} Starting from 2023, funding has been converted into other forms of student support.



VIRTUAL HELPDESKS

The Virtual Helpdesk system is a new online service to get in touch with the University offices. It is open to all University users (prospective students, enrolled students, international students, graduates and staff). The system is part of the University's digital transformation strategy aimed at the dematerialisation of procedures and services, improving the organisation of University activities and user interaction with the offices.

The <u>Virtual Helpdesk</u> system is structured around services (student administration, international mobility, personnel, other services). Users can get in touch with the operators via computer or smartphone in two ways:

- Synchronous communication: through a videoconferencing system integrated into the application. Users can access the service directly or make an appointment;
- Asynchronous communication: through a chat-like ticketing system. Users submit a request that generates a ticket. Users can monitor the status of their request, respond to any requests for clarification from operators and receive a reply. In 2023, the service was implemented in many new areas and the asynchronous mode of operation of the Virtual Helpdesk system was tested across several service categories, from document management to personnel services.

Ongoing guidance

Ongoing guidance is a support service offered during the first and second years of university to help students overcome momentary difficulties and prevent them from dropping out.

The ongoing guidance project envisaged in the 2022-2027 Strategic Plan aims to accompany all students throughout their studies by promoting a positive academic experience. Activities are designed to be inclusive, allowing participation by students with disabilities, specific learning disorders and special educational needs. In 2023, the project involved all (118) first cycle degree programmes, with 20,222 surveys submitted (65 degree programmes and 12,765 surveys in 2022).

Guidance for graduates

The University promotes its graduates' **employability** by supporting them in the transition from university to work, up to two years after graduation.

In 2023, over 1,700 students used Guidance for Graduates services to:

- develop useful tools for **job search** (CV writing, LinkedIn profile creation and preparation for job interviews) and develop **active job search strategies** (visiting websites, platforms and databases, exploring the job market and finding information on professions, online and offline networking, self-promotion);
- define a **professional project** based on one's experience, skills, inclinations, interests and values;
- adopt a proactive, self-promoting and realistic approach in looking for a job.

Activities are arranged around three modular pathways, allowing each participant to select those activities that are most useful within his or her own job search and career choice process. Each pathway aims to develop guidance skills, enhance one's personal features and encourage a proactive approach in the transition from university to work and in the following stages. Activities are offered also in English and include one-to-one guidance counselling, the duration of which is agreed on a case-by-case basis.

Table 11 - Career guidance activities (attendance)

Activities	2023
Group meetings on CV writing	172
Group meetings on LinkedIn	285
Group meetings on job search strategies	134
Group meetings on job interview preparation	244
Group meetings in English on CV writing	59
Group workshops to identify professional objectives and use career resources	10
Train yourself! Train your skills to face the world of work (in partnership with ER.GO)	9
Guidance on the path for the acquisition of transferable skills for PhD students	43
Seminar on CV writing in preparation for Career Day	135
Career guidance speeches during Career Day	80
In-person/online one-to-one CV Check Point interviews in preparation for Recruiting Day and Career Day	231
In-person/online one-to-one CV Check Point interviews (in partnership with ER.GO)	63
Guidance activities within degree programmes and professional master's programmes of the University	145
One-to-one guidance counselling interviews	115
Total activities	1,725

Job Placement

The Job Placement service of the University organises a range of initiatives to facilitate the transition from the university to the world of work. These include **meetings with businesses for recruiting** purposes, including preliminary and/or job interviews, thematic workshops, business games and case studies; **company tours** to learn about the local work environment and facilities; and **networking** activities with company representatives and, more and more frequently, with alumni presenting their professional experience. In 2023, the University held two **Job Corner – Aziende in Ateneo** events and the tenth edition of **Career Day**, engaging hundreds of Italian and international businesses.

Also in 2023, activities were held with human resources companies, technical managers and young testimonials who presented their workplace, positions and skills sought, selection processes and what it means to perform certain functions in a company.

In addition to career guidance and job placement activities, the University has implemented various services to support student entrepreneurship, as well as the possibility of including participation in specific courses on transferable skills, which are increasingly in demand in the world of work, in one's study programme.

Table 12 – Job placement

Activities	Companies/ Participants	2023
Job Incontra Online	companies involved	3
JOD INCONTRA OTHINE	participants	236
Job Incontra (in-person initiatives with individual companies)	companies involved	6
	participants	372
	companies involved	3
Company tours	participants	96
Job Corner - Aziende in Ateneo	companies involved	10

Activities	Companies/ Participants	2023
Isi Job Day (Computer Science and Engineering, Cesena Campus)	companies involved	40
Navile Chemical District Recruiting Day	companies involved	5
Navile Chemical District Rechaiting Day	participants	193
Recruiting@DicamWorks	companies involved	8
Recruiting@Dicarrivorks	participants	386
Veterinary Medical Sciences Recruiting Day	companies involved	10
	participants	74
Career Day (in person)	companies involved	171
	participants	3,693
	no. of ads posted	5,064
Job Placement Service	no. of accredited companies	1,105
JOD Flacement Service	no. of CVs seen	64,592
	total accredited companies	9,424



Student associations

<u>Student associations</u> organise cultural and social events to engage students in university and city life. Moreover, they support students facing an experience away from home or abroad. The University promotes and supports student associations by providing them with dedicated funds, spaces and media. In 2023, the University accredited 32 student associations.

THE FLOODS IN EMILIA-ROMAGNA: OUR STUDENTS' COMMITMENT

The floods that hit Emilia-Romagna in May 2023 triggered a wave of solidarity within the University of Bologna community. Students, staff and volunteers took action with great determination, providing concrete help and support, working tirelessly among the rubble, water and mud to assist people in need.

The students proved willing to temporarily pause their studies to dedicate themselves to assist anyone in need, showing unconditional commitment at a time of deep crisis. This episode calls to mind the 1966 flood, when young people mobilised to help water-ravaged Florence, earning the nickname 'Mud Angels'. In Romagna, volunteers found comfort and motivation in singing Romagna mia together.

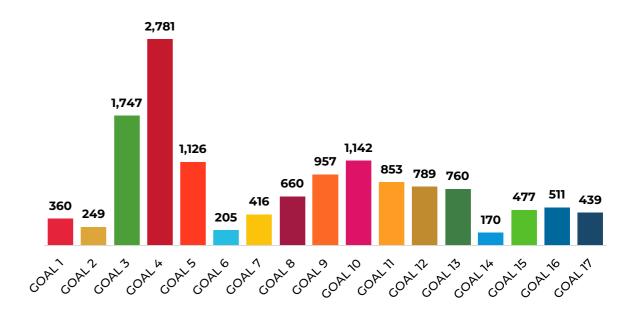
Thousands of volunteers reached the affected areas, providing a prompt response to the many reports and requests for help.

The University wishes to enshrine and enhance their extraordinary display of generosity and solidarity. To do so, it launched a campaign to collect testimonies through an online form, with the aim of documenting stories and experiences of mutual help, solidarity, generosity and sharing. Those testimonies were used to create a collective artwork, made by artist Francesca Grosso, to celebrate and remind us of the irreplaceable value of community, public responsibility and active participation.

4.5 IMPACT ON THE UN SUSTAINABLE DEVELOPMENT GOALS (SDGS)

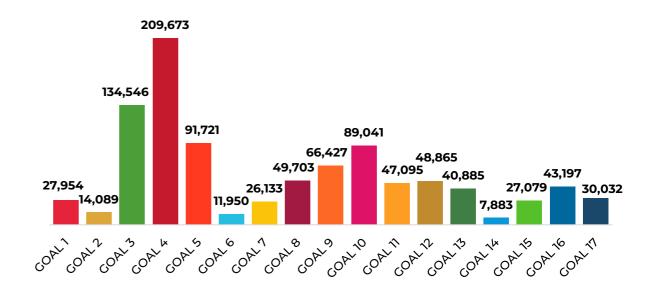
Through its course units, the University of Bologna contributes to the pursuit of the Sustainable Development Goals (SDGs). The total number of course units related to at least one SDG is 5,545. The same course unit is counted several times when it corresponds to more than one goal.

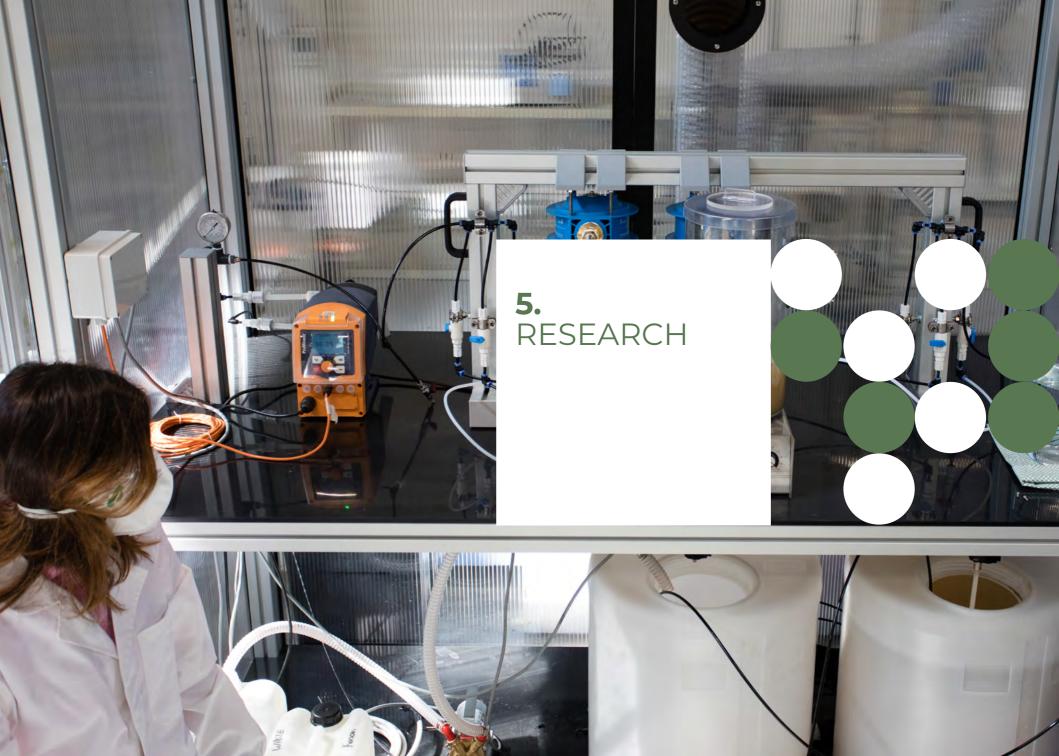
Figure 32 - Course units by SDG



Similarly, the total number of students involved in course units related to Sustainable Development Goals is shown below.

Figure 33 - Students by SDG









67
HORIZON EUROPE
PROJECTS



1,369RESEARCH
FELLOWSHIPS



5,994OUTGOING TEACHERS



€ 234
MILLION
INCLUDING €50
MILLION FOR
CASCADE FUNDING
CALLS
NRRP AND CNP



11,976
PUBLICATIONS



715VISITING
PROFESSORS AND
PHD STUDENTS

5.1 ITALIAN NATIONAL RECOVERY AND RESILIENCE PLAN (NRRP) AND COMPLEMENTARY NATIONAL PLAN (CNP) - RESEARCH PROJECTS

The Italian National Recovery and Resilience Plan (NRRP) is part of the Next Generation EU (NGEU) programme, the €750 billion package set up by the European Union in response to the pandemic crisis. It has a duration of six years, from 2021 to 2026, and a total value of €672.5 billion.

The Plan hinges upon three strategic axes – digitisation and innovation, ecological transition, social inclusion – and is structured around six Missions that reflect strategic axes. In particular, Mission 4, Education and Research, has two components: "Strengthening the provision of education services: from nurseries to universities" (M4.C1) and "From research to business" (M4.C2). The Complementary National Plan (CNP) aims to supplement the interventions under the Italian National Recovery and Resilience Plan (NRRP) with national funds, totalling €30.6 billion over the same period. The level of progress, network of partnerships and personnel recruited by the University of Bologna for the second component M4.C2 are presented below.

NRRP GOALS



M1.

DIGITISATION, INNOVATION, COMPETITIVENESS, CULTURE AND TOURISM



M2.

GREEN REVOLUTION AND ECOLOGICAL TRANSITION



M3.

INFRASTRUCTURE FOR SUSTAINABLE MOBILITY



Μ4

EDUCATION AND RESEARCH

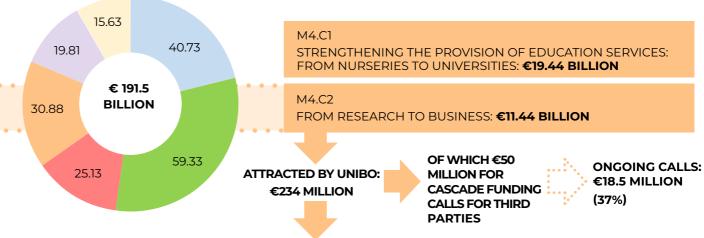


M5.

INCLUSION AND COHESION



M6. HFALTH

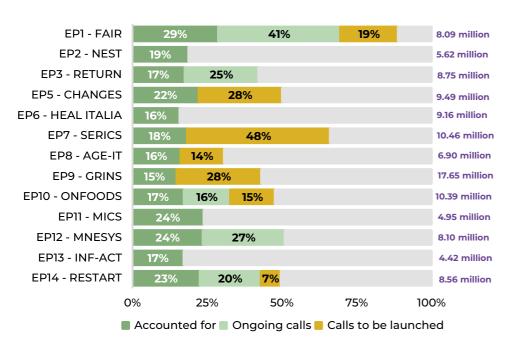


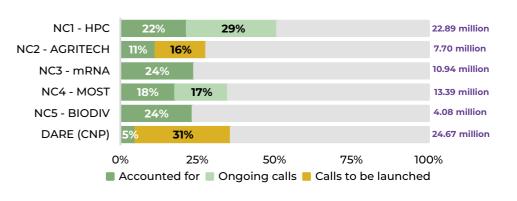
Investment 1.3: Extended partnerships between universities, research centres, businesses and funding of basic research projects	EPs	€112.6 million 13 projects
Investment 1.4: Strengthening research structures and strengthening R&D 'national champions' on some Key Enabling Technologies	NCs	€83.7 million 6 projects (including DARE CNP)
Investment 1.5: Extended partnerships between universities, research centres, businesses and funding of basic research projects	ECOSISTER	€25.8 million 1 project
Investment 3.1: Fund for the creation of an integrated system of research and innovation infrastructures	RI	€12.4 million 8 projects

Level of progress of projects by investment

Investment 1.3

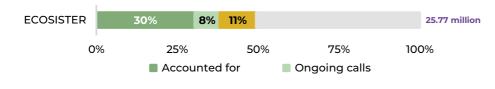
Investment 1.4

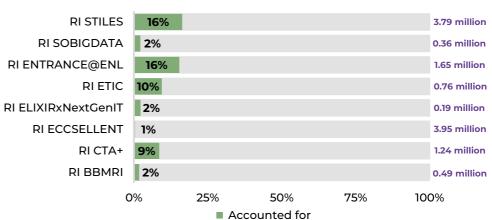




Investment 3.1

Investment 1.5





Under the NRRP, **extended partnerships (EPs)** fund 14 major research projects on just as many themes identified by the Italian Ministry of University and Research as key for cultural, social, scientific, technological and medical development.

The University of Bologna is a partner in every winning project selected for each theme (with the exception of partnership 4, in which we did not participate). The 13 winning projects are:

- Artificial intelligence: Foundational aspects (EP1) FAIR Future Artificial Intelligence Research;
- Energy scenarios of the future (EP2) NEST Network 4 Energy Sustainable Transition;
- Environmental, natural and anthropic risks (EP3) RETURN Multi-Risk sciEnce for resilienT commUnities undeR a changiNg climate;
- Humanistic culture and cultural heritage as innovation and creativity labs (EP5) CHANGES Cultural Heritage Active Innovation for Sustainable Society;
- Innovative diagnostics and therapies in precision medicine (EP6) HEAL ITALIA Health Extended ALliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine;
- Cybersecurity, new technologies and protection of rights (EP7) SERICS Security and RIghts in the CyberSpace;
- Effects and challenges of ageing (EP8) AGE-IT Italian Ageing Society;
- Economic and financial sustainability of systems and territories (EP9) GRINS Growing Resilient, INclusive and Sustainable;
- Sustainable nutrition models (EP10) ONFOODS Research and innovation network on food and nutrition Sustainability, Safety and Security Working ON Foods;
- Circular and sustainable Made in Italy (EP11) MICS Circular and Sustainable Made in Italy;
- Neuroscience and neuropharmacology (EP12) MNESYS A multiscale integrated approach to the study of the nervous system in health and disease;
- Emerging infectious diseases (EP13) INF-ACT One Health Basic and Translational Research Actions addressing Unmet Needs on Emerging Infectious Diseases;
- Telecommunications of the future (EP14) RESTART RESearch and innovation on future Telecommunications systems and networks, to make Italy more smart;
- Agenzia Spaziale Italiana (Italian Space Agency) Space activities (formerly EP15).

NCs are national research and development centres (so-called 'champions') capable of achieving significant capacity for innovation and research by partnering with other research centres, universities and businesses, on five areas that are of strategic interest for the country's development.

The themes are: high performance simulations, computation and data analysis, agricultural technologies, development of gene therapy and drugs based on RNA technology, sustainable mobility and biodiversity. The University of Bologna is a partner in every winning project selected for each theme, namely:

- High performance simulations, computation and data analysis (NC1) ICSC National Centre for HPC, Big Data and Quantum Computing;
- Agricultural technologies (NC2) Agritech National Research Centre for Agricultural Technologies;
- Development of gene therapy and drugs based on RNA technology (NC3) National Centre for Gene Therapy and Drugs Based on RNA Technology;
- Sustainable mobility (NC4) CNMS National Sustainable Mobility Centre;
- Biodiversity (NC5) NBFC National Biodiversity Future Centre.

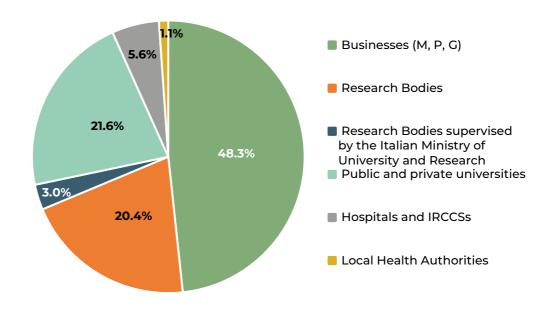
Innovation ecosystems aim to facilitate technology transfer and expedite the digital transformation of production processes, while keeping in mind economic and environmental sustainability and social impacts at a local level. These are local, regional or supra-regional networks of State and non-State universities, public research institutions or local public bodies, and other public and private actors. The project submitted by the University of Bologna together with the other universities of Emilia-Romagna, the National Research Council (CNR), the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the National Institute for Nuclear Physics (INFN) and the CINECA Inter-university Consortium, and coordinated by ART-ER, is called ECOSISTER – Ecosystem for Sustainable Transition in Emilia-Romagna. This obtained the highest score and ranked first in the national ranking for NRRP innovation ecosystems.

Research infrastructure (RI) projects concern facilities, resources and services that are used by the scientific community to conduct research. Each RI can be single-site or distributed.

The University of Bologna's research infrastructure projects that received funding under the NRRP are:

- SoBigData.it Strengthening the Italian RI for Social Mining and Big Data Analytics (DIGIT);
- **ELIXIRxNextGenIT** ELIXIR x NextGenerationIT (H&F);
- **BBMRI.it** Strengthening the Biobanking and Biomolecular Resources Research Infrastructure in Italy (H&F);
- ENTRANCE@ENL Infrastructure for ENergy TRAnsition aNd Circular Economy @ EuroNanoLab (PSE);
- **CTA+** Cherenkov Telescope Array Plus (PSE);
- STILES Strengthening the Italian leadership in ELT and SKA (PSE);
- ETIC Einstein Telescope Infrastructure Consortium (PSE);
- **ECCSELLENT** Development of ECCSEL R.I. ItaLian facilities: usEr access, services and loNg-Term sustainability (ENE).

Figure 34 - Relationships between the University of Bologna and other actors within the NRRP

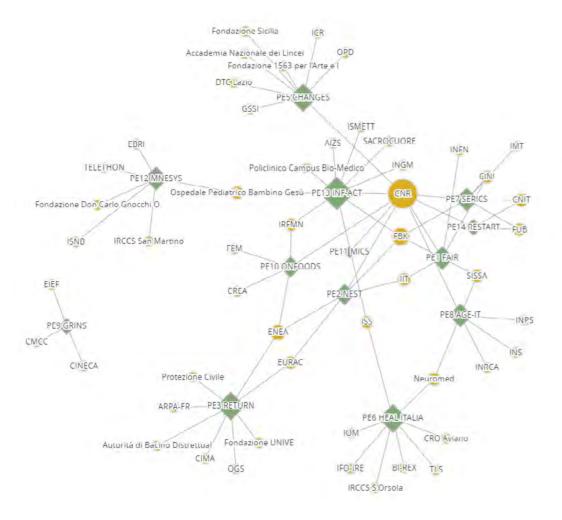


Partnerships with public and private actors

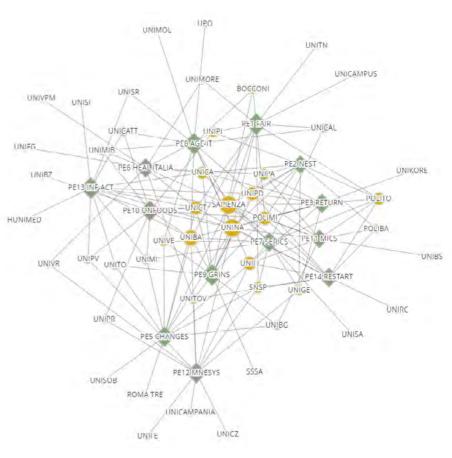
The following infographics show the networks established by the University of Bologna with public and private actors within NRRP projects. Green diamonds represent the projects and yellow circles represent the University's partners.

The size of the objects increases in proportion to the number of partnerships.

Investment 1.3 – Partnerships - Public Network (excluding Universities)

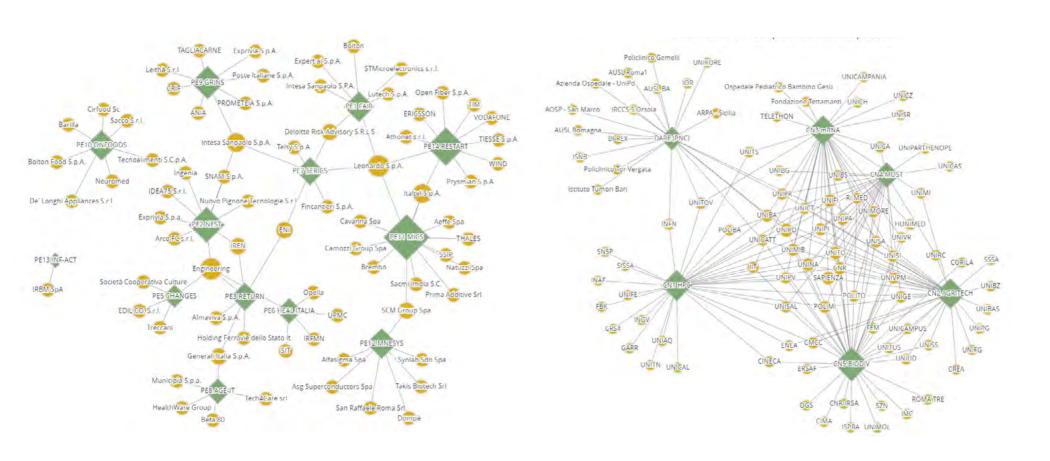


Investment 1.3 – Partnerships with Universities





Partner



Projects
Partner

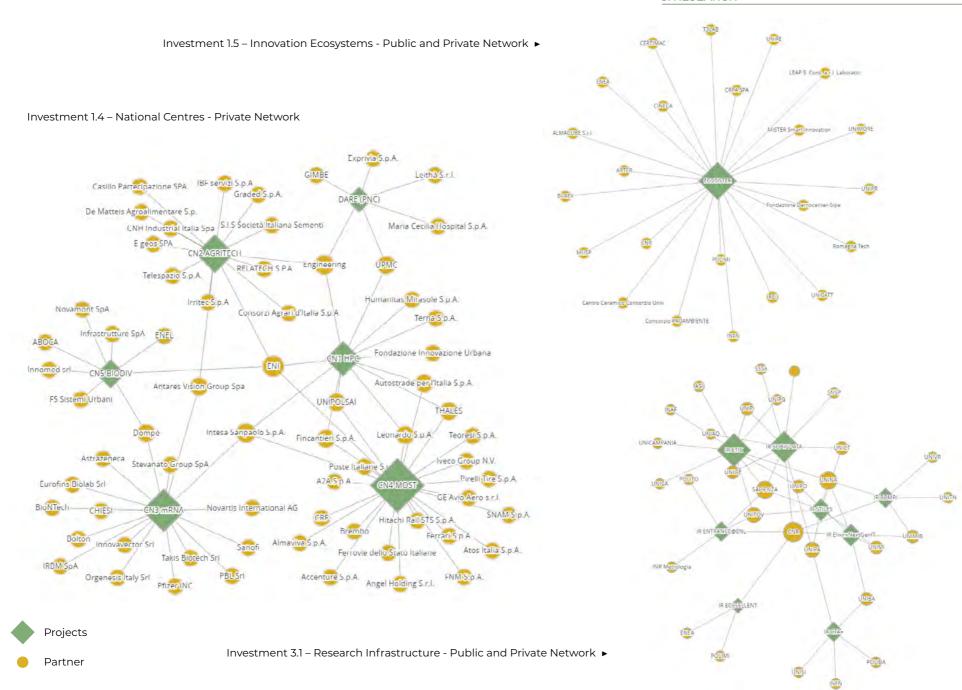
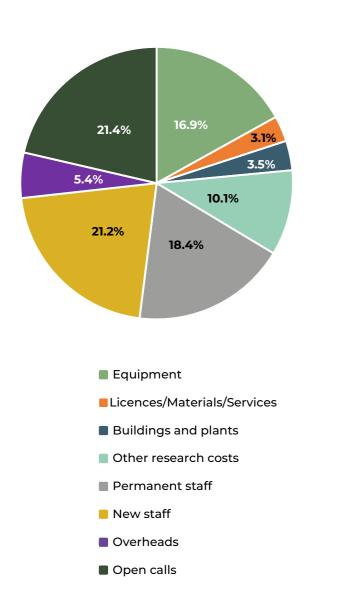


Figure 35 - Breakdown of NRRP and CNP budget items

Figure 36 – Breakdown of newly hired staff



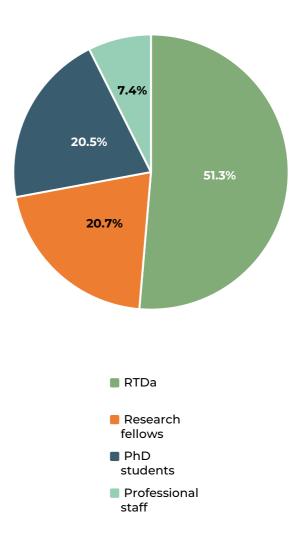


Figure 37 – Newly hired research staff by area and gender

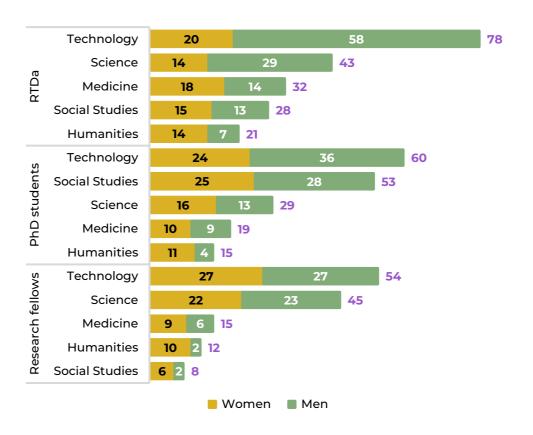
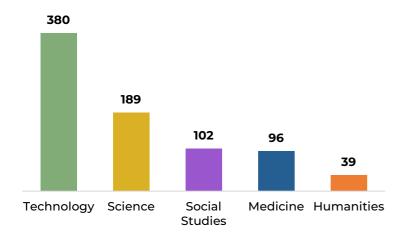
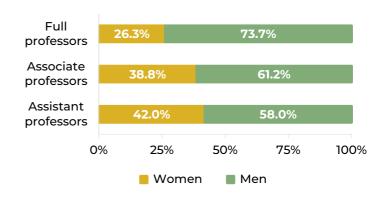


Figure 38 - Teachers and researchers involved in NRRP and CNP projects by area and gender





NRRP PRIN

In 2023, 161 PRIN projects received funding under the NRRP, totalling €15 million. The University of Bologna acts as coordinator in 67 projects.

NRRP PhD scholarships

In the 39th cycle, 329 scholarships were awarded under the NRRP, 113 of which were co-financed by companies.

NRRP Construction

The University used these resources to strengthen its research infrastructure, by repurposing existing facilities to be used for research and co-working, and to build new laboratories designed according to the principles of sustainability, with a focus on energy efficiency and reducing emissions.

Seven of the 16 construction works planned started in 2023. Among other things, they will result in the creation of new workstations for researchers, research fellows, PhD students and teachers.

Table 13 – Construction works within NRRP/CNP projects

Call	Project acronym	Name of construction work	Surface area involved	Workstations created
NC	НРС	Construction works for DEI research laboratories at the former Neuro Clinic, Via Ugo Foscolo 7 – Bolo- gna	349.56 m2	28 workstations + 1 meeting room
NC	BIODIV	Construction works for new research laboratories at the Fano Marine Centre – Fano	985 m2	34 workstations
NC	BIODIV	Construction works for an electrical substation in preparation for the construction of new research laboratories at the Fano Marine Centre – Fano	Feeding the entire FMC build- ing = 3,484 m2	Feeding around 88 new and exist- ing workstations + 100-seat audito- rium
NC	AGRITECH	Construction works for the Cadriano tractor test track (Spoke3) in the Cadriano site, Granarolo Emilia (BO)	3,796 m2	3 researchers can work at the same time
NC	AGRITECH	Construction works for the swine enclosure in the Ozzano nell'Emilia site (BO)	775 m2	2 researchers can work at the same time
EP	EP09 - GRINS	Redevelopment works for the construction of a computational laboratory, Piazza Scaravilli 2 – Bologna	188 m2	24 workstations
CNP	CNP-DARE	Repurposing of spaces for researchers of the DEI Department, Via Saragozza 8 – Bologna (construc- tion code 339).	350 m2	22 workstations



5.2 COMPETITIVE PROJECTS

Horizon Europe and other EU programmes

The University of Bologna promotes multidisciplinary and international research and understands seizing every opportunity to establish new partnerships through competitive funding as a value.

Launched in 2021, Horizon Europe 2021-2027 is the EU framework programme for research and innovation. With a total budget of €95.5 billion, it is the world's largest international research and innovation programme. It seeks to strengthen the EU's scientific and technological bases, boost its innovation capacity, promote competitiveness and employment, and offer concrete solutions to its citizens' priority needs.

The University of Bologna is among the top European universities in terms of funding received under Horizon Europe. In 2023, 87 of its projects were awarded funding, including 33 projects in which the University acts as coordinator, totalling over €35.8 million. Overall, the University's participation in Horizon Europe has resulted in 183 projects been awarded funding of more than €85 million in total. The University's growth in Pillar I of the programme, "Excellent Science", has been especially significant, particularly in the sub-programmes enhancing high quality research (European Research Council) and boosting researchers' careers (Marie Skłodowska-Curie Actions). Important results have also been achieved in Pillar II, "Global Challenges and European Industrial Competitiveness", confirming the quality of the University's research on food, the bioeconomy and the environment, and improvements in the area of health.

In order to encourage the participation of its own research teams, the University of Bologna organises meetings and seminars to present the calls for applications available under the Framework Agreement and discuss cross-cutting topics, such as ethics and Open Science, in order to share strategies and opportunities for participation.

With a view to promoting Open Science and its impact on society, the University has developed a strategy and invested in resources, including specific professionals called 'data stewards', tasked with supporting teachers and researchers in managing research data and drafting their data management plan for Horizon competitive projects.

The University of Bologna is also involved in other EU programmes, such as LIFE, Interreg, Creative Europe and CERV. Within the LIFE projects focusing on climate, nature, environmental sustainability and the energy transition towards clean energy, the University has achieved significant results and confirmed itself as the top university in Italy and among the top ones in Europe in terms of funding received. Out of 11 project proposals submitted in 2023, three were awarded funding, totalling €1.3 million.

Figure 39 – EU projects

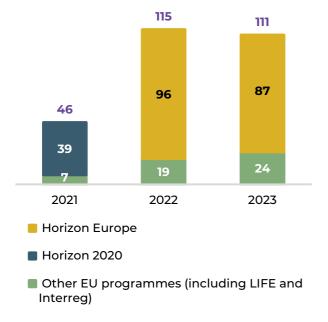
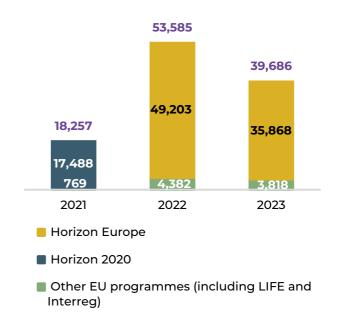


Figure 40 – EU project funding (€ thousands)



National projects

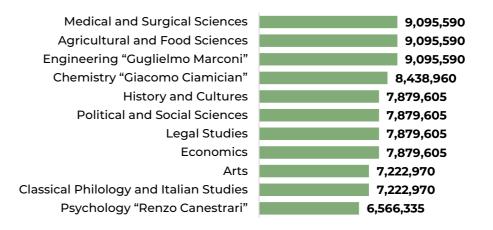
Departments of Excellence

Under the Departments of Excellence initiative launched by the Italian Ministry of University and Research to identify and fund top-level university departments in terms of research quality and development project, the University of Bologna was awarded a total of €88.3 million in funding, to be received over the five-year period 2023-2027. This second edition of the initiative has involved 11 Departments of the University of Bologna.

Table 14 - Departments of Excellence - funding by Department (€)

Department	2023
Chemistry "Giacomo Ciamician"	1,687,792
Classical Philology and Italian Studies	1,444,594
Electrical, Electronic and Information Engineering "Guglielmo Marconi"	1,819,118
Psychology "Renzo Canestrari"	1,313,267
Economics	1,575,921
Legal Studies	1,575,921
Political and Social Sciences	1,575,921
Agricultural and Food Sciences	1,819,118
Arts	1,444,594
Medical and Surgical Sciences	1,819,118
History and Cultures	1,575,921
Total	17,651,285

Figure 41 – Departments of Excellence – 2023-2027 funding



Research Projects of National Interest

In 2023, 515 PRIN projects received funding (2022 call), totalling €38 million. The University of Bologna acts as coordinator in 58% of the projects.

FIS Projects (Italian Fund for Science)

In 2023, the Italian Ministry of University and Research issued the FIS 2022-2023 call with the aim of financing fundamental research projects in all ERC areas. The University of Bologna submitted 134 projects and applied for funding of approximately €234.4 million in total. Proposals are currently being reviewed.

FISA Projects (Italian Fund for Applied Sciences)

In 2023, the Italian Ministry of University and Research issued the FISA 2023 call with the aim of financing interventions to improve the competitiveness of the national production system through the enhancement of industrial research and experimental development, bringing about social, economic and industrial benefits. The University of Bologna submitted seven projects and applied for funding of €44.7 million in total. The review of proposals is currently pending completion.

5.3 INVESTMENT IN RESEARCH

In order to support basic research and monitor the social impact of research, as well as to ensure maintenance of the Multicampus research equipment and the strategic development of Departments, the University of Bologna launched several initiatives during 2023.

Alma CaReS was launched in response to the climate crisis that hit Emilia-Romagna in May 2023 to support interdisciplinary or multidisciplinary projects addressing land and human resilience to climate change and its social impacts. Alma CaReS was funded through the 5x1000 donation made to the University in 2021, amounting to approximately $\{417,000\}$.

Alma Scavi 2023 supports archaeological field research activities in Italy and abroad. Under this initiative, 37 projects received funding, totalling €300,000.

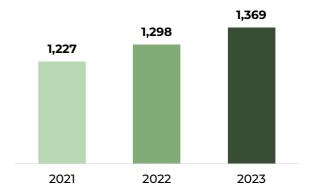
Alma Attrezzature 2023 supports maintenance and upgrading of the Multicampus research equipment and encourages equipment sharing also through the creation of dedicated platforms. Overall, 59 applications received funding, totalling €450,000.

Strategic Departmental Development Projects (PSSD) encourage departmental excellence, rewarding the quality of research and of scientific, organisational and teaching projects, based on the model of the Departments of Excellence initiative financed by the Italian Ministry of University and Research.

The mapping of research equipment continued in 2023 in order to promote the upgrading, enhancement, effective management and long-term sustainability of equipment. This resulted in the creation of a database of over 1,100 equipment data sheets, distributed across some 40 facilities throughout the Multicampus. Total funding of \in 450,000 was earmarked for the maintenance and/or upgrading of existing infrastructure and preparatory activities are ongoing for the acquisition of new research equipment, to be managed in an open and shared manner, for a total investment of over \in 3,250,000 through the Alma Attrezzature 2022 call.

Since 2023, the two-year **Integrated Research Budget** (BIR) can be used by Departments to cover any expenditure concerning research and/or the third mission, in accordance with the applicable law. The allocation for 2023 was €12,796,445. As at 31 December 2023, 399 research fellows were fully or partially funded under the BIR.

Figure 42 - Research fellowships



5.4 PHD

A PhD is the highest level of education in the Italian academic system. PhD programmes aim to develop skills to conduct high-level research activities at universities, public bodies and private organisations.

In the 2022/23 academic year, the number of new PhD students grew, concurrently with an increase in the population of second-level graduates. This growth is mainly due to the University's ability to attract ministerial funds for PhD scholarships, which are allocated based on merit. Thanks to the Italian National Recovery and Resilience Plan (NRRP), the number of new PhD students is expected to increase even further in the future.

Figure 43 – Second cycle and single cycle graduates in Italy

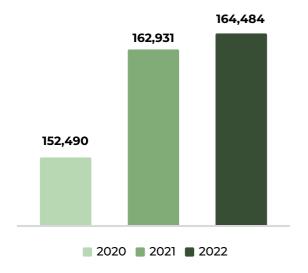
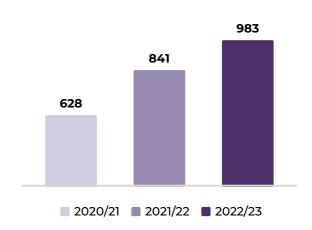


Figure 44 - New PhD students at the University of Bologna



The "Evaluation of the study and research experience and future prospects" survey conducted in collaboration with AlmaLaurea in 2023 shows satisfaction with learning activities, especially with regard to the competence of teachers (average score 8.1 points on a scale of 1-10). As to the PhD programme experience as a whole, participants expressed great satisfaction with their supervisor's competence on the topic of their thesis and with the possibility of developing new competencies and specific skills through the PhD programme.

on thesis topic Acquisition of new 8.1 competencies and specific 7.8 7.6 Supervisor's networking 7.4 ability 7.2 7.1 Mastery of research techniques 6.5 In-depth theoretical study Quality of basic research Career prospects Mastery of teaching techniques

Supervisor's competence

Figure 45 – Satisfaction with structured learning activities (scale 0-10)

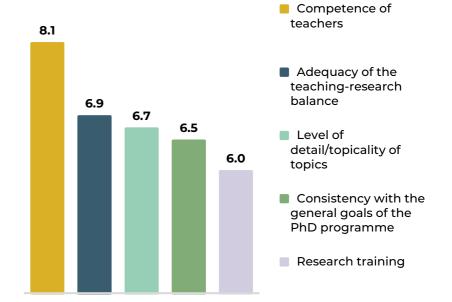
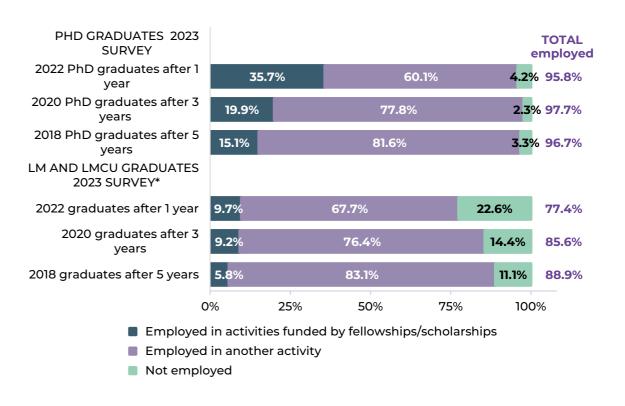


Figure 46 - Satisfaction with the PhD experience (scale 0-10)

The "Employment status" survey conducted by AlmaLaurea on former students 1, 3 and 5 years after graduation shows an employment rate for PhD graduates of 95.8% 1 year, 97.7% 3 years, and 96.7% 5 years after graduation – higher than the rate for second-level graduates from the University interviewed in 2023.

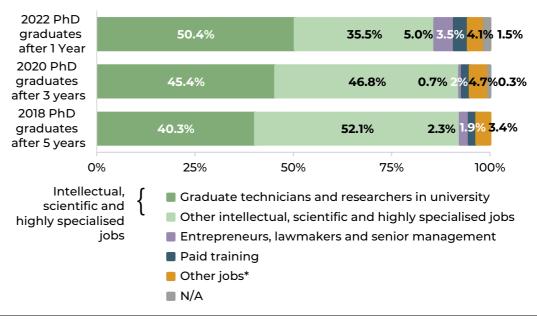
Figure 47 – Employed PhD graduates, comparison with graduates



^{*} Second cycle (LM) and single cycle (LMCU) graduates employed in activities funded by fellowships or scholarships also include those attending PhD programmes, specialisation schools or other training, provided these are paid activities.

The figure below shows that PhD graduates are mostly employed in intellectual, scientific and highly specialised jobs (85% 1 year, 92% 3 and 5 years after graduation).

Figure 48 - Employed PhD graduates by job



^{*} Technical jobs, executive office jobs or other.

5.5 PUBLICATIONS AND PRODUCTS OF RESEARCH

The University of Bologna's Research Information System (IRIS) is maintained by our teachers and researchers. It gathers all information on the University's scientific production (publications and products of research) and allows managing the full text of the contributions submitted in accordance with the Open Access model.

Figure 49 – Products of research by type

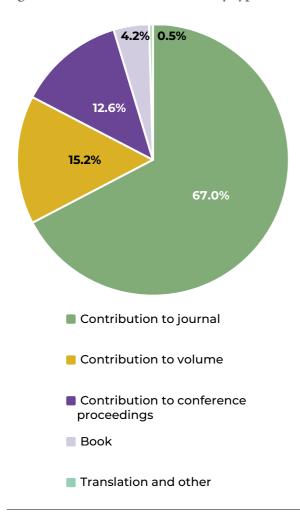
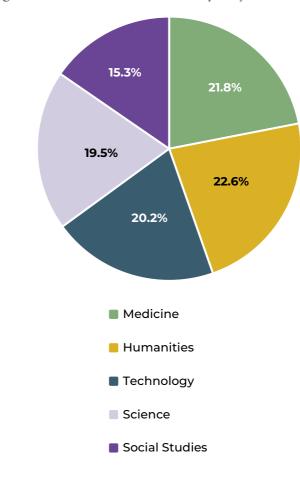


Figure 50 – Products of research by subject area



⁶ Number of products published in IRIS in 2023 by staff working at the University in 2024 (2023 photo updated in April 2024).

The new Research Evaluation system

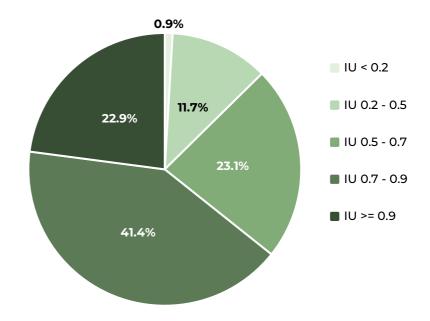
In 2023, the University completed its internal research evaluation process, initiated in 2022 with the publication of the 2015-2019 Research Quality Evaluation (VQR) results. At the end of 2023, the University Research Evaluation Committee (VRA) confirmed the general outline of the evaluation system for the new 2024 cycle as well, and incorporated the amendments made under the 2020-2024 VQR call. In the future, the University's methods and tools for internal research evaluation will also refer to the activities of the Coalition for Advancing Research Assessment, (https://coara.eu/), an important initiative promoted by the Council of Europe with the aim of improving research evaluation. The University of Bologna joined the coalition by signing the Agreement on Reforming Research Assessment and, together with the National Research Council, it currently chairs the Italian National Chapter of the coalition.

Research quality

The Single Index (IU) of each publication is the weighted average of two values: the journal impact factor percentile and the citation percentile. Both percentiles are taken from the main bibliometric databases (Scopus, Web Of Science) and are expressed on a scale of 0-1, where 1 is the best possible result.

23% of the University of Bologna's publications are in the highest quality group, i.e. have a Single Index greater than or equal to 0.9. The figure has decreased slightly compared to last year (24%).

Figure 51 – Comparison of distribution of University's publications by Single Index



5.6 MOBILITY

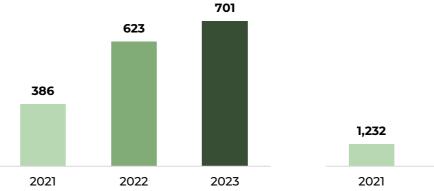
Outgoing mobility

The University encourages international mobility of teaching and research staff through a number of programmes and agreements with institutions in the EU and the rest of the world. Opportunities include the Erasmus+ Programme for mobility, Marie Skłodowska-Curie Actions for research, memoranda of understanding with the Italian Ministry of Foreign Affairs and International Cooperation, framework agreements with universities in non-EU countries for teaching, and sector-specific agreements for research and teaching. Other opportunities include the possibility of temporarily carrying out activities at other institutions under dedicated partner agreements and participating in the EURIAS Fellowship Programme for research or in the University of Sussex EPDF Programme for research and teaching.

In 2023, 701 PhD students participated in mobility programmes, significantly exceeding the figure of 2019 (501); moreover, the number of teachers (5,994) finally exceeded the pre-pandemic figure (5,173 in 2019).

Figure 52 – Outgoing PhD students with at least 30 days of mobility in the year

Figure 53 – Outgoing teachers in the year



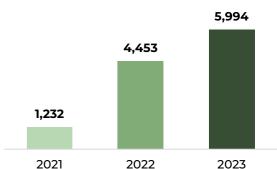




Figure 54 – Main countries of destination for teachers and researchers (three-year period 2021-2023)

Marco Polo Programme

The programme funded by the University of Bologna pays monetary incentives to unconfirmed and fixed-term assistant professors, research fellows and PhD students to promote research stays at universities or research centres abroad, lasting between three and six months. Incentive recipients were 186 in the 2020/21 academic year, 283 in the 2021/22 academic year and 325 in the 2022/23 academic year.

Incoming mobility

During 2023, various international mobility opportunities were available to host teachers, researchers and scholars at the University of Bologna for research, teaching, study, international cooperation and curriculum development purposes. Some of the opportunities available are listed below:

- Erasmus+ Programme to host professors from European universities (for teaching);
- Erasmus+ Programme to host personnel from European organisations and businesses (for teaching);
- Marie Skłodowska-Curie Actions (for research);
- Memoranda of understanding with the Italian Ministry of Foreign Affairs and International Cooperation (MAECI) (for research);
- Fellowships at the Institute for Advanced Studies (ISA) Senior fellow (for research);
- Fellowships at the Institute for Advanced Studies (ISA) EURIAS fellow (for research).

In 2023, incoming mobility increased and exceeded the pre-pandemic figure (506 in total in 2019).

Figure 55 – Visiting professors⁷ and PhD students

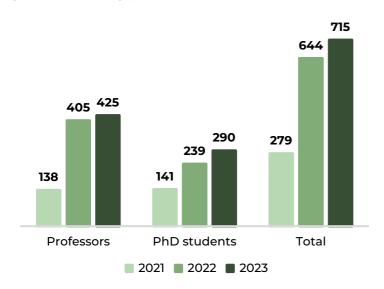
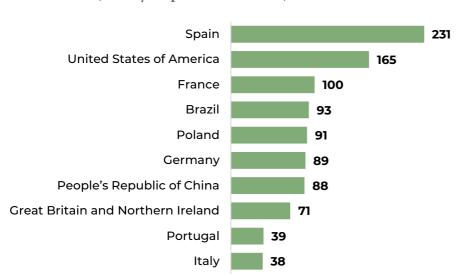
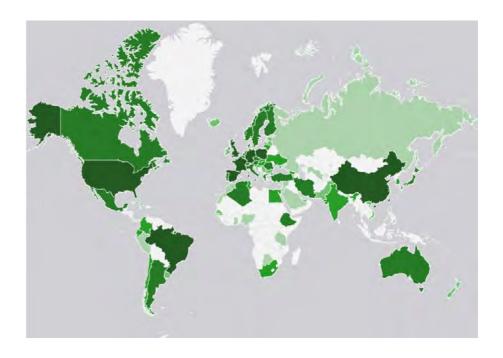


Figure 56 – Main countries of origin of visiting professors and PhD students (three-year period 2021-2023)





In this heat map, the number of visiting professors and PhD students from each country of the world is represented. Darker shades indicate higher values.

⁷Visiting professors also include research fellows.

Institute of Advanced Studies (ISA)

The Institute of Advanced Studies (ISA), together with the Collegio Superiore, is part of the University of Bologna's Institute for Higher Studies (ISS). The ISA is an interdisciplinary and international centre of excellence and a place for scientific debate in the various disciplinary areas represented at the University.

In 2023, the ISA incremented the number of Visiting Fellows (VFs) and offered a packed schedule of activities across the Multicampus sites, thanks to the dedication and interest of international teachers.

The ISA hosted 23 Senior Visiting Fellows from Austria, Australia, Canada, Denmark, France, Germany, Israel, Iran, Ireland, Iceland, New Zealand, the Netherlands, the United Kingdom, Serbia, Spain, the United States and Switzerland, and ten international PhD students from China, Ethiopia, India, Iran, Pakistan, Peru, Poland and Russia. As of 1 November 2022, the International PhD College is part of the 3rd cycle of the Collegio Superiore. The Institute hosted three Visiting Fellows from Ukraine within a call specifically dedicated to them (12-month Visiting Fellowships). The Institute also held 32 ISA Lectures, 13 ISA Topic conferences in collaboration with the Departments, one presentation within the ISA Doctoral Prize, and two so-called Research Showcase presentations focussing on the research lines of Visiting Fellows. It further sponsored four meetings held by the University Quality Committee. Lastly, it actively participated in the activities of the international networks of advanced studies of which it is a member – NetIAS and UBIAS.

5.7 MEDICAL RESEARCH AND RELATIONS WITH THE ITALIAN HEALTH SERVICE

Biomedical research and healthcare activities are closely integrated with one another, in order to ensure a balance between the right to health and the independence of research. Thanks to a memorandum of understanding between the Region and the universities, which regulates the participation in and sharing of resources and activities, the University of Bologna contributes to the definition of regional health planning, which in turn influences our institutional activities and medical research and training policies.

Research activities include clinical trials promoted by both private companies (for-profit studies) and researchers (non-profit studies). In 2023, the University of Bologna's scientific supervisors conducted 157 new clinical trials, many of which in collaboration with the Bologna University Hospital (IRCCS AOU).

In addition to acquiring funds from commissioned research and consultancy contracts, totalling \in 4.8 million, and from competitive calls, totalling \in 13.4 million, in 2023 the Departments of the Medical Area developed various research lines thanks to donations, which amounted to \in 1.7 million.

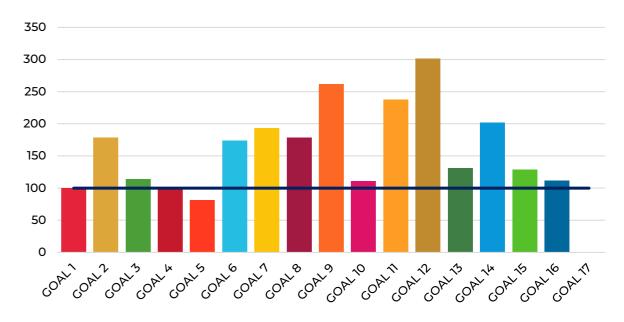
The University of Bologna and the four IRCCSs at which our teachers perform work have entered into agreements to define how they can collaborate in joint research programmes, integrating the agendas of medical researchers and colleagues from multiple disciplines, such as chemistry, physics, biomedical engineering, computer science and biotechnology. Four additional University-IRCCS joint research laboratories were set up in 2023.

These include the Molecular Medicine and Biology laboratory at IRCCS AOU and the Neurogenetics, Proteomics, Metabolomics and Bioanalytical Chemistry and Rehabilitation Bioengineering laboratories at IRCCS Institute of Neurological Sciences.

In the period 2020-2023, in order to implement the development project of single cycle degree programmes in Medicine in Romagna, the University funded the hiring of teachers and researchers, also in partnership with local bodies and the Romagna Local Health Authority.

5.8 IMPACT ON THE UN SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Figure 57 – University of Bologna's per capita publications compared to the European benchmark (European benchmark value equal to 100)



The histogram shows the ratio of the University of Bologna's number of publications per capita relating to each SDG compared to the European benchmark. Values below 100 indicate lower productivity than the average of the other European universities considered. 8

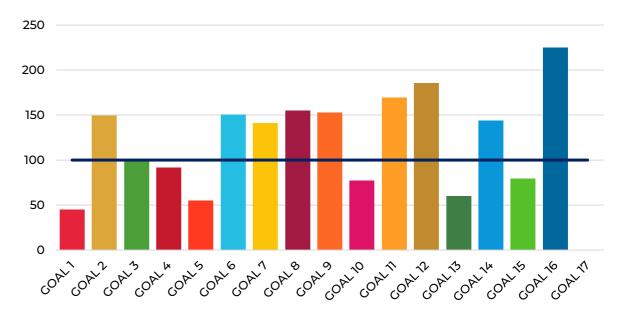
The universities taken into consideration are the top nine European universities ranked in the QS World Universities Ranking 2024, which are similar to the University of Bologna in terms of size (more than 30,000 students), areas of study and research (all five QS subjects, including Medicine), research intensity (very high, i.e. more than 10,000 publications in the last year), status (public). Below is the list of the

universities considered: UCL (University College London); University of Edinburgh; The University of Manchester; University of Amsterdam; Ludwig-Maximilians-Universität München; University of Copenhagen; Sorbonne University; Katholieke Universiteit Leuven; Université Paris-Saclay.

As a whole, the University of Bologna outperformed the European benchmark in almost all goals, especially in SDG 12 (Responsible consumption and production), SDG 9 (Industry, innovation and infrastructure) and SDG 14 (Life below water).

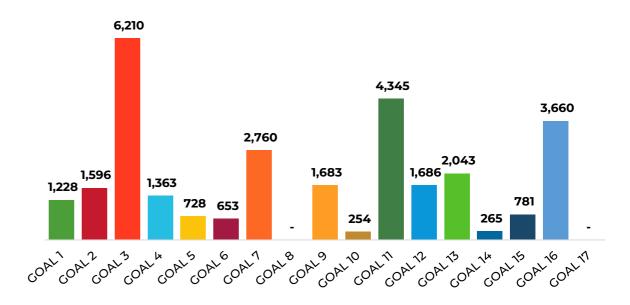
⁸ Data on publications and citations related to the UN SDGs were extracted from the Elsevier SCIVAL/SCOPUS suite on 30 April 2024 (Elsevier Mapping July 2023). Elsevier does not cover SDG 17 due to difficulties in finding a suitable selection query.

Figure 58 – University of Bologna's per capita citations compared to the European benchmark (European benchmark value equal to 100)



The citations of University of Bologna's publications also outperformed the European benchmark in the majority of the SDGs considered. This is especially evident in the SDG Peace, justice and strong institutions.

Figure 59 – Contribution to Horizon Europe projects in 2023 (€ thousands)



The University of Bologna's Horizon Europe projects that support sustainable development goals are presented in thousands of euros. Projects financed in 2023 are taken into account.

The data, processed on an experimental basis, originate from the abstracts of the projects entered into the "OSDG.ai" open source platform. This uses artificial intelligence to assign up to 3 SDGs to each project.







3,382
TEACHING AND
RESEARCH STAFF
+ 6.5%



3,242
PROFESSIONAL
STAFF
+2.8%



96,721 STAFF TRAINING HOURS IN 2023 +19.8%



2,330,000€

CORPORATE

WELFARE FOR

PROFESSIONAL

STAFF



311 SMART WORKING AGREEMENTS



1,963
REMOTE WORKING
PROJECTS

Teachers and researchers are at the heart of higher education and research activities and directly contribute to strengthening the University's academic and scientific excellence. Professional staff and library staff, on the other hand, provide essential support in the management of research, teaching and third mission activities, ensuring the University's efficiency and productivity. The interaction and cooperation between the two categories of staff are crucial in meeting the University's goals and promoting continuous development of knowledge and innovation.

6.1 TEACHING AND RESEARCH STAFF

STAFF	FULL-TIME TEACHING	PART-TIME TEACHING
PROFESSORS	350 hours per year (at least 120 hours of lecturing)	250 hours per year (at least 80 hours of lecturing)
JUNIOR ASSISTANT PROFESSORS	350 hours per year (up to 60 hours of lecturing)	200 hours per year (up to 60 hours of lecturing)
SENIOR ASSISTANT PROFESSORS	350 hours per year (at least 60 hours of lecturing)	
TENURE -TRACK ASSISTANT PROFESSORS	350 hours per year (at least 60 hours of lecturing)	200 hours per year (up to 60 hours of lecturing)

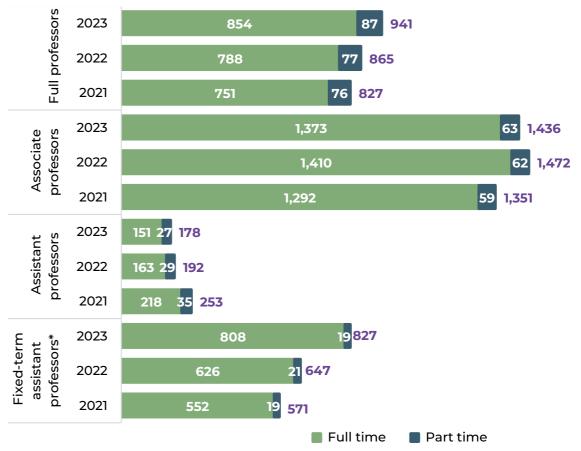
The teaching staff play a key role in the University's teaching activities, with varying responsibilities according to their working time regime and contract type. Full and associate tenured professors are mainly engaged in lecturing and supplementary teaching activities, which may include additional student services.

Established contractual arrangements apply to fixed-term assistant professors, with a focus on research in line with their role.

In addition, teachers and researchers may carry out extra-institutional activities, which must be notified or authorised in accordance with the University Regulations and national legislation.

At the end of 2023, the number of teaching staff employed by the University was 3,382 and the number of adjunct teaching staff was 1,378.





^{* 265} junior and 306 senior assistant professors in 2021; 308 junior and 339 senior assistant professors in 2022; 449 junior, 365 senior and 13 tenure-track assistant professors in 2023.

Figure 61 – Teaching and research staff by location (Bologna and Romagna Campuses)

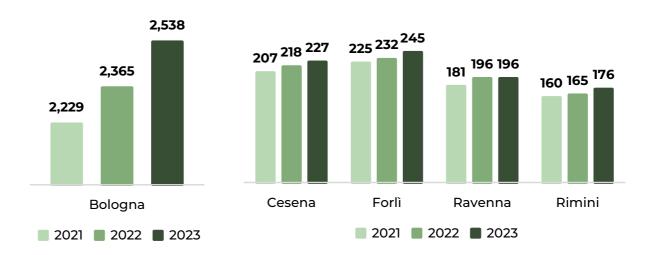
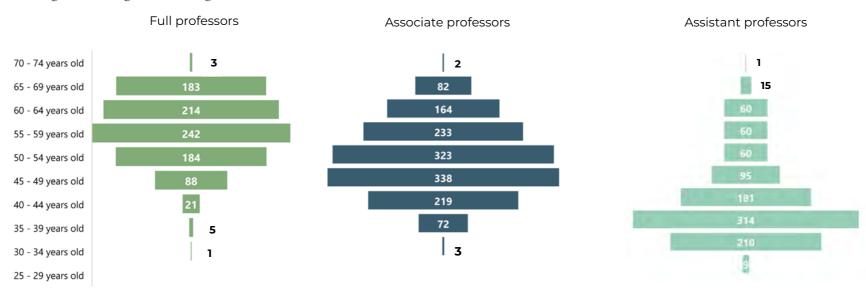


Figure 62 – Age of teaching and research staff as at 31/12/2023



Thanks to the new hires in the past 5 years, the average age of teaching and research staff went from 51.3 in 2019 to 50.2 in 2023.

Figure 63 – Teaching staff hires⁹

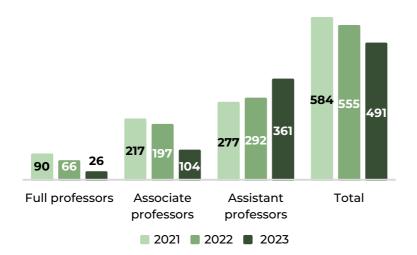
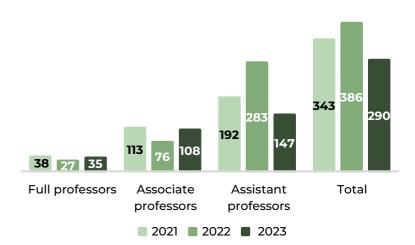


Figure 64 – Teaching staff terminations



Teaching staff **hires** and **terminations** in the three-year period 2021-2023 show a positive balance of 611 units, i.e. 1,630 hires and 1,019 terminations. In particular, in the year 2023, a positive balance of 201 units was recorded, i.e. 491 hires and 290 terminations. The balance was positive for full professors (+147), associate professors (+410) and assistant professors (+308).

Teaching and research staff policies

Since 2022, the University has implemented gender equality policies to incentivise the hiring of female professors by co-funding direct calls of female full professors from abroad, consistently with the goal of reducing the Glass Ceiling Index. The measure yielded the expected results and the 2023 index is lower than in previous years, indicating an increased presence of women among full professors.

Moreover, an incentive mechanism was approved to **recruit professors from outside** the University of Bologna. Also this measure yielded positive results and external recruitment in 2023 increased.

⁹ Teaching staff hires include both new external resources and internal career progressions..

Table 15 – Salary progression of teachers and researchers (allocation of salary levels)

Teachers and researchers	2021	2022	2023
Persons entitled	1,361	931	1,382
Approved	1,139	735	1,162
% approved	83.7%	78.9%	84.0%

The **salary progression** of professors is based on two-year salary levels, determined through periodic evaluations. Evaluations cover teaching, research and management activities carried out by professors. If the outcome is positive, the teacher progresses to the next higher salary level for two years.

The University has allocated a **Bonus Fund** to teaching and research staff for specific positions and competitive projects, providing for ancillary remuneration higher than that provided for by law.

Table 16 - Remuneration under the Bonus Fund for teaching and research staff

Incentive	2021	2022	2023
Bonus Fund (under Article 9 Law 240/2010)	€1,040,341	€2,237,377	€1,752,473

The figure refers to the gross amount paid by the institution in the year considered. The Fund decreased by 21% between 2022 and 2023.

Teaching and research staff training

Training teachers and researchers is of the utmost importance to the University in order to foster teaching innovation with a view to continuous improvement. A **training plan** has been developed, including theoretical, methodological and technology enhancing actions. In 2023, 55 training initiatives for teachers were attended by 2,851 participants (excluding mandatory training).



Teaching and research staff are required to attend **mandatory training** on occupational health and safety, privacy and anti-corruption. In 2023, 14,782 hours of training were attended by 3,057 participants. Initiatives were also held in connection with well-being, equal opportunities, inclusion and sustainability.

6.2 PROFESSIONAL STAFF

At the end of 2023, the professional staff employed by the University consisted of: 18 managers (including the Director General), 3,140 employees, 76 foreign language assistants and instructors, and seven agricultural workers, i.e. 3,242 staff in total.

Figure 65 – Professional staff with full-time or part-time contract



Figure 66 - Professional staff/Teacher ratio

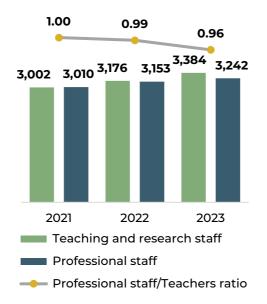
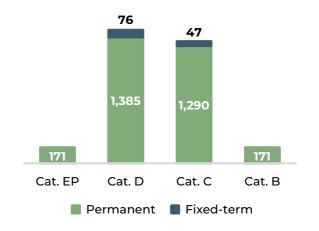


Figure 67 – Professional staff distribution (EP, D, C, B) by contract type

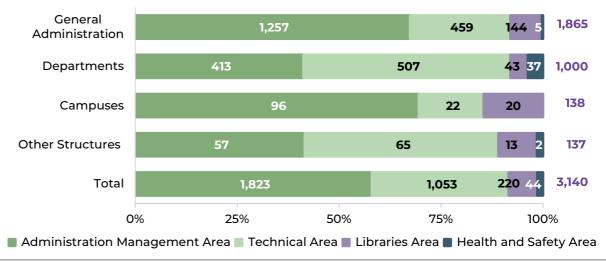


Professional staff work in different structures and can be grouped by functional area according to the main tasks they perform. General Administration employs 1,865 people, around 450 of whom provide direct support to Departments. They are assigned to services such as libraries, IT, teaching, and support for the medical area.

Professional staff carry out their tasks within the Departments, the General Administration or other facilities such as Interdepartmental Research Centres, performing work in various areas:

- Administrative or Administration Management area: providing support in purchasing processes, institutional affairs, legal and contractual issues, accounting and tax management, HR management, privacy, information security, strategic planning and management control, internationalisation, knowledge transfer (Third Mission), teaching and research, and salaries;
- Technical area: laboratory technicians or technicians providing teaching/research support, software development, IT infrastructure, IT support services, service design and big data, facility and asset management: management of facilities, of movable and immovable property, of energy saving, of planning, design and maintenance of buildings and systems;
- Libraries area: database management, document management, content management, organisation of libraries and related services;
- Health and Safety area: occupational health physicians, midwives, health surveillance support staff, animal welfare supervision and workplace safety supervision, waste management;
- Foreign language instructors (CEL): foreign language teaching support, language laboratories, management of course units, modules, seminars, practical work, tutoring and student support.

Figure 68 – Professional staff distribution by structure and functional area



¹⁰ Excluding managers, CEL and agricultural workers.

Figure 69 - Professional staff by location (Bologna and Romagna Campuses)

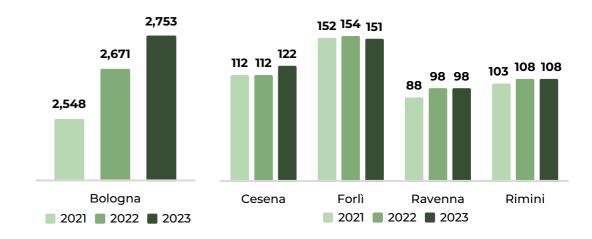
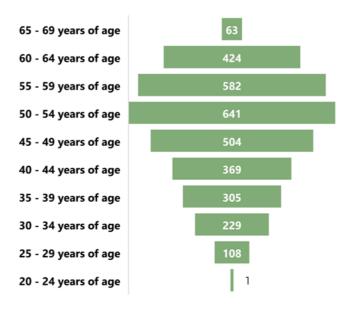


Figure 70 - Age of professional staff



In the period 2021-2023, the balance of permanent professional staff hires and terminations was positive (92 units in 2023).

Figure 71 – Permanent professional staff hires and terminations ¹¹



 $^{^{\}rm II}$ The figures include permanent employment contracts and exclude changes of category.



Sistema di Misurazione e Valutazione della Performance

Only in Italian

Professional staff policies

The University of Bologna applies the 2019-2021 **National Collective Bargaining Agreement** (CCNL) for Personnel in the Education and Research Sector. The evaluation of individual professional staff members is based on the **Performance Measurement and Evaluation System** (SMVP), which encourages dialogue between managers and employees and provides for an annual evaluation of staff who are given positions of responsibility, an individual evaluation of other professional staff, and an evaluation of performance of CEL staff (foreign language instructors and fixed-term foreign language assistants).

The 2023 update of the University Statute and Code of Ethics and Conduct promotes **collaboration between teaching and professional staff**. A working group was set up to revise the University Statute, which met 17 times during the year. In addition, ten plenary meetings were held with the Senate and the Board of Governors. The Code of Ethics was revised by a working group made up of professional staff only.

Professional growth

The University of Bologna offers opportunities for professional growth through reclassifications (Progressioni Economiche Verticali – PEV) or in-range progressions (Progressioni Economiche Orizzontali – PEO). Although the University used the maximum recruitment capacity allowed by current legislation for reclassifications, the opportunities for progression proved insufficient to cover all staff. The University regulations will be updated to comply with the new legislation and to plan future **reclassifications** in 2024, using resources from the 2022 and subsequent planning. This information is available on the <u>University's web pages</u>.

In-range progressions allow permanent professional staff to obtain salary increases within the category to which they belong, without changing their current level of autonomy and responsibility. The PEO session for the year 2023 ended in December, when the relevant progressions were assigned.

Table 17 – Reclassifications completed as at 31/12/2023 by category

Area	Category	Posts	Positions covered
Libraries (electronic resources)	D	2	2
Administration (Head of Unit)	EP	1	1
Administration (Teaching chain coordinator)	EP	2	2

Table 18 – – In-range progressions 2023 resources and summary data

Category	Persons entitled	Recipients	% Recipients or Entitled	Earmarked resources
EP	140	13	9.3%	32,656
D	774	128	16.5%	191,116
С	873	215	24.6%	215,561
В	153	32	20.9%	37,779
Total	1,940	388	12.4%	477,112

Ancillary remuneration and incentives

Starting from January 2023, the remuneration of professional staff was increased to comply with the provisions of the 2019-2021 National Collective Bargaining Agreement (CCNL) signed in December 2022.

In 2023, the University allocated additional funds to various initiatives. In addition, more resources were earmarked for staff with organisational positions or positions of responsibility and the amount set aside to the **Organisational Performance Incentive** (IPO) was increased.

Allowances for tasks involving particularly heavy work, risks or hardship (FORD) remained unchanged compared to the previous year, while the Ancillary Monthly Allowance (IMA) was increased to take account of headcount growth, without prejudice to the monthly amounts already distributed in previous years. The funding for Additional Hourly Services (POA) remained in line with that in the previous years.

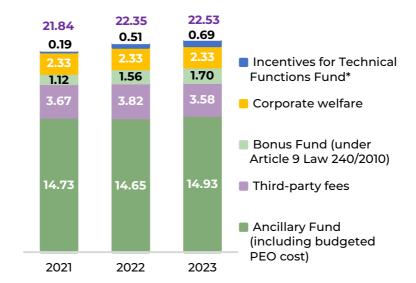
In 2023, new **Regulations governing services provided to third parties** were introduced, providing for "direct third-party fees" for staff directly involved in the contracts. The charge on total proceeds from activities carried out in favour of third parties, to be allocated to the fund for employed staff, went from 15% to 18%.

In 2023, under the **Regulations on bonuses**, additional remuneration was allocated to professional staff for both Departments of Excellence projects and specific positions.

In 2023, the University was qualified by ANAC as a commissioning body and invested heavily in the training of personnel involved in procurement and design and in architecture and construction services.

The new Regulations for incentives for technical functions ensure inclusive distribution among all job roles. The incentive percentage was set at 2% of the basic amount. 80% of this is used for incentives for staff involved in the entire chain of procedures; the remaining 20% is reinvested in specialist technical training, purchase of equipment and services, always in the area of continuous improvement of activities referring to the Public Contract Code.

Figure 72 – Incentives for professional staff and foreign language instructors



^{*} Incentives for Technical Functions Fund: for works, supplies and services.

Internal and external mobility

The purpose of **internal mobility** is to make the most of people's professional skills and motivation, while respecting the needs of the organisation. Before publishing new calls, employees are asked about their actual interest in mobility. Both calls for internal mobility to cover positions of responsibility and calls for roles requiring specific technical skills were published in 2023. These were open to permanent staff irrespective of their contract category, without replacing applications in specific calls.

All staff willing to apply for **external mobility to other public administrations** were able to participate in calls launched by such other public administrations or apply for transfer through direct exchange.

At the end of 2023, a Virtual Helpdesk for career guidance and mobility was set up to facilitate mobility processes.

Table 19 - Internal and external mobility

Internal mobility	2021	2022	2023
Number of internal mobility applications (new + renewals)	69	100	52 ¹²
Applications accepted 13	24	37	23
Number of calls for internal mobility	47	20	36
Number of internal staff transfers (both based and not based on calls; excluding changes between units of the same structure)	80	128	173
of the same structure)			
External mobility	2021	2022	2023
<u>, </u>	2021	2022 67	2023 26
External mobility			
External mobility Number of requests for external mobility authorisation Number of requests for external mobility authorisation	17	67	26

University welfare and other benefits

The University Welfare Agreement with trade unions was revised in 2023 by adding several new benefits. These

¹² Procedure open since November 2023.

¹³ 2021: of which seven referring to applications filed in 2021 and 17 referring to applications filed in previous years; 2022: of which 14 referring to applications filed in 2022 and 14 referring to applications filed in previous years; 2023: of which one referring to an application filed in 2023 and 22 referring to applications filed in previous years.

include commute allowance, UniSalute health insurance policy, subsidy for summer camps and babysitting services, subsidy for nursery school fees, childbirth allowance and other financial aid.

Table 20 – Main benefits

Agevolazioni	Euro
Commute allowance allocated (for professional staff and foreign language instructors). To purchase local public transport season tickets at discounted rates (see Section 8).	525,000
UniSalute health insurance policy To receive health services (including preventive medical examinations, depending on one's age) and medical expense reimbursement. The premium is paid by the Administration (the estimated amount is indicated since the premium for 2023 is pending confirmation.	1,094,544.00
Allowance to enrol children in summer camps and purchase babysitting services Permanent and fixed-term professional staff and foreign language instructors with children under the age of 14 may apply for a maximum amount of €1,400.	101,655.53
Allowance paid to enrol children in nurseries For permanent and fixed-term managers, professional staff and foreign language instructors. The benefit is limited to a maximum amount of €1,400 (last available in the 2021/22 school year).	43,683
Childbirth allowance For professional staff and foreign language instructors. The 2023 childbirth allowance refers to staff with children born in 2022. The benefit was paid to applicants in the entitled ISEE categories according to the CCNL supplementary agreement. Benefit amount: €500.	8,000
Other financial aid A financial aid, the amount of which varies according to the applicant's ISEE, was granted by the University to support professional staff and foreign language instructors in the event of significant personal or family needs.	55,155

Figure 73 – Number of benefits paid (Unisalute)

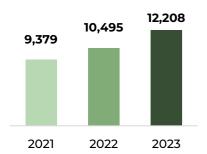




Table 21 – UniSalute health insurance policy

Professional staff	2021	2022	2023
Registered	2,947	3,099	3,033
Recipients	1,753	1,935	2,167

THE FLOODS IN EMILIA-ROMAGNA: THE UNIVERSITY SUPPORTS ITS COMMUNITY

To deal with the consequences of the floods, the University of Bologna deployed a series of financial, organisational and scientific measures that contributed to reducing the suffering and damage incurred by the University community.

For a certain period of time, remote working, smart working and decentralised working from satellite offices were guaranteed for all professional staff affected by the floods, in addition to a 36 work hour credit.

The remarkable generosity of those professional staff who gave up part of their accrued holiday leave to colleagues in need is worth highlighting.

The University of Bologna allocated a grant for students faced with particular difficulties due to the floods and waived their tuition fees for the 2023/24 academic year. In the wake of the floods, the University's scientific expertise was used to tackle and counter extreme weather events. Five projects were selected within the Alma CaReS – Climate change, Resilience, Sustainability initiative and funded with over 400,000 from the 5x1000 donation campaign. These will make a **significant social impact on the environment and citizens**, as well as include a plan for public dissemination.

Training

The University of Bologna offers mandatory and non-mandatory training courses. Compared to last year, the total number of training hours attended by professional staff increased by 38.8%, highlighting the University's growing commitment in staff training.

Mandatory training in 2023 focussed on Occupational Health and Safety, Privacy and Anti-corruption in compliance with current regulations

Figure 74 – Training hours per capita by category

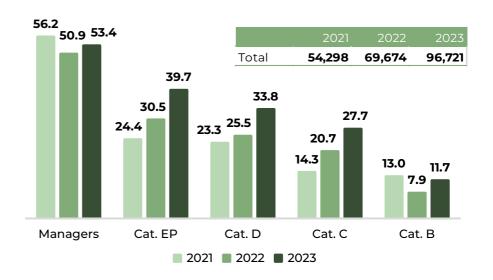
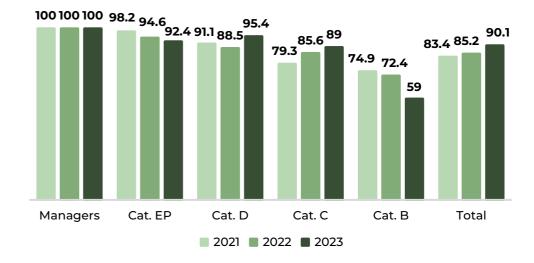


Figure 75 – Percentage of trained personnel 14



 $^{^{\}rm 14}$ Percentages are 33.3 in 2021, 32.5 in 2022 and 74 in 2023 for foreign language instructors and assistants.

Table 22 – Training hours by subject area

Subject area	Hours attended
Communication area	1,687
Management control area	1,434
Economic and financial area	13,816
Legal and regulatory ared ⁵	22,470
IT and digital area	22,267
International area	2,248
Language area	11,271
Management area	4,421
Organisation and personnel area	7,464
Technical-specialist area	9,643
Grand total	96,721

¹⁵ Of which 17,744 hours of mandatory training, broken down as follows: 14,372 hours of mandatory training on Occupational Health and Safety; 3,372 hours of other mandatory training (Privacy, Anti-corruption, Transparency, Waste, Animal Welfare, etc.)

Moreover, the University of Bologna sees **non-mandatory training** as a key tool for professional growth and for raising the quality of the services offered. The main training sessions in 2023 involved:

- 2,645 participants in the Training catalogue on cross-cutting topics, professional skills and strategic content;
- 9,639 participants in the Digital skills development plan;
- 1,800 accesses and 11,000 hours attended in language skills improvement programmes;
- 564 participants in seminars on adapting to a virtual work environment;
- 539 participants in courses on developing remote work skills;
- 182 participants in Department-specific technical training, induction training, individual and group coaching.

The University encourages the **international mobility of permanent and fixed-term professional staff through international placements** in line with the Erasmus+ Programme, which offer on-the-job training experiences in international contexts both within and outside the EU and contribute to the professional growth of staff and internationalisation of the University.

Remote, smart and decentralised working

The University of Bologna is committed to implement and streamline remote, smart and decentralised working arrangements for professional staff, with a view to promoting work-life balance.

Remote working allows work to be carried out at home and, starting from 2023, professional staff may activate this arrangement by submitting a request online. **Smart working** is a new organisational model that allows work to be carried out without time and place constraints. In 2023, each University structure identified up to 20% of its staff, i.e. 311 people, to perform smart work.

Decentralised working from satellite offices allows staff to work at premises designated in advance by the University. In 2023, 29 locations were activated across various Campuses and sites.

Table 23 – – Remote, smart and decentralised working in figures

Tipology	2021	2022	2023
Remote working	461 ¹⁶	1,668	1,963
Smart working	Trial	136	311
Decentralised working from satellite offices	29	29	29
Total	490	1,833	2,276

¹⁶ In 2021, additional remote working arrangements were set up: 139 for temporary situations requiring protection and 383 for short-term extraordinary situations.



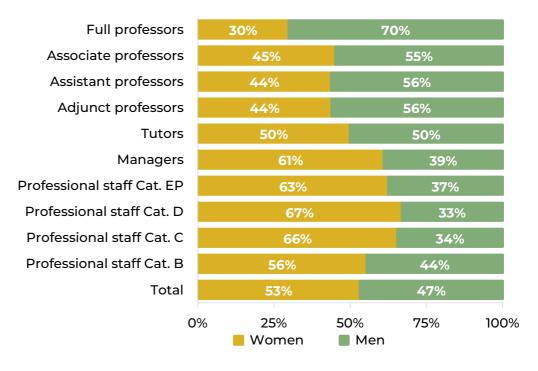
Gender Equality Report

6.3 GENDER AND CITIZENSHIP

A breakdown of the teaching staff by gender shows that men are more numerous, particularly in senior roles. Among assistant professors, men make up 56% and women 44% of the total. Although this ratio is not far from gender parity, the gap has increased compared to 2022. Among associate professors, percentages are 55% for men and 45% for women, while the gap is larger among full professors, where men are 70% and women 30%.

Among professional staff, including managers, foreign language assistants and agricultural workers, women are the majority and make up 62% of staff vs. 38% of men. Unlike among teaching staff, there is no significant increase in the percentage of men among professional staff as the role increases: from category D to category EP, the growth is only 4 percentage points, far from the 15 percentage points among associate and full professors.

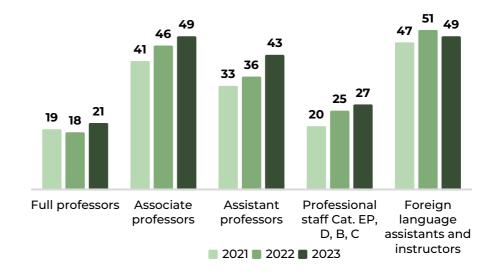
Figure 76 – Staff distribution by gender¹⁷



For a comprehensive overview of gender distribution among students, teaching staff, professional staff and members of University Bodies, please see the Gender Equality Report published on the University website.

¹⁷ 100% of agricultural workers are men (no. 7 men and no. 0 women). Foreign language instructors and assistants in 2023 were 82% women and 18% men.

Figure 77 – Staff with foreign citizenship¹⁸



6.4 ORGANISATIONAL WELL-BEING

Community health and organisational well-being are of great importance to the University, which implements its policies in these fields through seminars, training, information material, meetings and awareness-raising campaigns aimed at both teaching and professional staff. The University offers a network of support and counselling services to improve the quality of its community's working life.

Health and safety

The Occupational Health and Safety Service ensures that the health and safety of all those who live and work within the University is protected. The Service assesses risks, defines preventive measures, draws up safety manuals and regulations, and arranges fire-fighting and emergency plans.

Risk assessments cover both general and cross-cutting risks at the facilities under review, as well as activity-specific risks (exposure to chemical, carcinogenic and biological agents, noise, vibrations, optical radiation, load handling, ergonomic factors).

¹⁸ All managers are Italian citizens.



In 2023, the University continued to invest in occupational **health and safety training**, providing both students and staff with general and specific training for low and medium-risk activities, through e-learning in both Italian and English.

In particular, students were offered 140 training courses on medium risk in Italian and English, as well as two training courses on high risk.

Additionally, 38 courses on medium risk and one course on high risk were offered in collaboration with Local Safety Officers.

Training for emergency personnel continued, involving 213 participants across 18 sessions. Specialist training was introduced with regard to new regulations, including the use of hazardous substances and radiation protection, and courses were arranged for key roles in charge of occupational safety at the University, including local and central safety officers, workers' safety representatives and safety trainers. Training was extended to teachers and professional staff members in charge of health and safety.

Lastly, 20 training courses on the use of hazardous equipment were held by third-party organisations.

As a whole, 442,350 hours of health and safety training were delivered in 2023 (excluding hours delivered to students), including 87,724 via e-learning.

The assessment of occupational health and safety risks, including work-related stress risks, aims to identify organisational factors that have a positive or negative effect on work-related risks. From this assessment, carried out pursuant to Legislative Decree 81/08, a generally positive picture emerged, with a few aspects to focus on in a dedicated corrective action plan.

The trend of total **work-related injuries** at the University has changed little over time. Commuting accidents, on the way to and from work, occur more frequently or just as frequently as accidents at work; falls are the most frequent category. Accidents at the University of Bologna are less frequent and less severe compared to the Education sector in general, based on the figures recorded by INAIL (Italian National Institute for Insurance against Accidents at Work). As far as students are concerned, there have been slight variations in the trend of accidents over the years, with a prevalence of work-related accidents compared to commuting accidents, including sports accidents.

Through the Occupational Health Centre, the University offers its employees a voluntary health promotion programme with a range of prevention and health protection actions, such as **flu vaccination.** In 2023, from October to December, 1,642 employees across all Multicampus locations received free flu vaccination.



Confidential Cousellor

Inclusion and protection

The University is deeply committed to supporting persons with disabilities and those who face professional or personal difficulties. The **Inclusion and Work Protection Office** devotes itself to integrating them into the work environment, promoting the principles of diversity and disability management. This interdisciplinary and cross-cutting approach aims to shape and strengthen organisational well-being and enhance each person's specificities. The Office is also responsible for fulfilling regulatory requirements in relation to the right of persons with disabilities to work. As at 31 December 2023, the University employed 196 persons with disabilities.

The **Confidential Counsellor** is an impartial reference point for the University community in matters of discrimination, harassment, mobbing and compliance with the Code of Ethics and Conduct. While having no legal powers, the Confidential Counsellor does have functional autonomy in promoting preventive actions and settlements and facilitates a culture of gender and non-discrimination by working together with the academic facilities. In 2023, the Confidential Counsellor helped 75 people, i.e. 56% among teaching staff, 27% among professional staff and 17% among students. Her actions were positively supported by the CUG, the Vice Rector for Personnel, the Vice Rector for Research and the Delegate for Students.

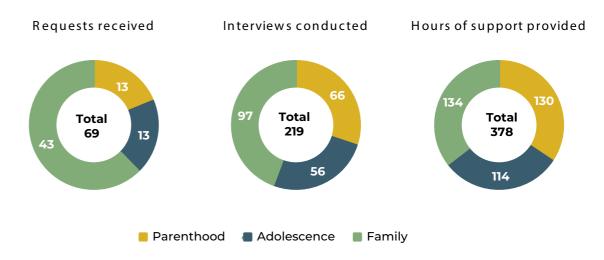
Psychological support

"Avrò Cura di Me", (I'll take care of myself) is a free service that offers all staff counselling, support and guidance in managing emotional overload and relational difficulties in various areas, including professional life. The aim is to help people identify and use their inner resources to improve their own psychological flexibility and well-being. Between 6 October 2022 and 6 October 2023, around 640 hours of support were provided, with 443 requests submitted by professional staff (222), teachers and researchers (98), research fellows (53), and others, including tutors and PhD students. A satisfaction survey showed that over 85% of users were satisfied or very satisfied with the service and the help they had received.

"Sportello Universitario contro la Violenza di Genere", the Helpdesk against gender-based violence continued working in 2023. Opened in 2022, the service offers a protected environment for counselling and support to victims of violence, both within and outside the University. The Helpdesk is managed by Casa delle donne per non subire violenza (Women's Refuge) in Bologna and is available remotely to ensure Multicampus coverage. The service is free of charge and also available in English. Another Helpdesk against gender-based violence opened in November 2023 on the Forlì Campus. The Helpdesk is managed by Centro Donna of Comune di Forlì, as part of the project "Il rispetto è il pane dell'anima: insieme è più facile, no alla violenza sulle donne" (Respect feeds the soul: together it's easier, say 'no' to violence against women), in partnership with the Department of Interpreting and Translation.

The "Avrò Cura di Te" (I'll take care of you) service continued its activities in 2023, providing dedicated psychological support for adult caregivers, including parents of pre-school/school age children and adolescents, or children/spouses of elderly or ill family members.

Figure 78 – The service "Avrò cura di te"



In 2023, initiatives were launched to promote the **well-being** and **occupational inclusion** of University employees. As a whole, these involved 791 participants for 4,074 hours of training in total. The initiatives included a cycle of seminars focussing on remote work, in collaboration with the Guarantee Committee for Equal Opportunities, Employee Well-being and Non-Discrimination at Work (CUG), which involved 564 participants for 3,384 hours of training in total. The cycle was accompanied by a meeting for staff in management positions, which involved 115 participants for 230 hours.

Ten initiatives in the area of sustainability were also implemented, involving 152 participants for 644 hours of training in total, in addition to five participations in postgraduate programmes on the ecological transition.



Circolo Università di Bologna (CUBO)

Circolo Università di Bologna (CUBO) implements social and cultural initiatives with a view to promoting leisure time, tourism, sports and socially useful activities directed at both member and non-member employees. In 2023, CUBO had around 900 members and over 3,000 people took part in its initiatives.



900 MEMBERS



3,000EVENT PARTICIPANTS





142 SCHOLARSHIPS FUNDED BY THIRD PARTIES



1,323 EVENTS IN 2023



5,413,519DOCUMENTARY HERITAGE
(BOOKS, PERIODICALS, OTHER)



310PATENT FAMILIES



59SPINOFFS AND STARTUPS



2,016ARTICLES AND EVENTS (UNIBO MAGAZINE)



175,641 MUSEUM VISITORS



POSTGRADUATE
PROGRAMMES AND
LIFELONG LEARNING
PROGRAMMES

7.1 TECHNOLOGY TRANSFER

The University of Bologna **develops technology transfer activities** in many ways – through agreements, partnerships and joint laboratories, the Emilia-Romagna High Technology Network, by protecting and exploiting its own intellectual property, via idea scouting, and by supporting students and teachers/researchers who wish to launch new entrepreneurial activities (spinoffs and startups).

Agreements and partnerships

The University of Bologna enters into **agreements with public and private institutions** that share the same principles and goals, in order to maximise the impact of initiatives with and for society. The University has established intensive cooperation with the local community through a number of partnerships and framework agreements with third sector organisations and companies. These arrangements seek to bring about collaboration in teaching and research and internships at third-party organisations.

New agreements in the field of teaching were signed in 2023 with various public bodies and private businesses, including Comune di Bologna, Cyberloop S.r.l., Galletti S.p.A., Imola Informatica S.p.A., among others. Partnerships were also set up with the Board of Surveyors and Graduate Surveyors of Bologna, for a vocational degree programme in Techniques for Construction and Land, and with the Italian National Board of Industrial Technicians, for practical evaluation internships.

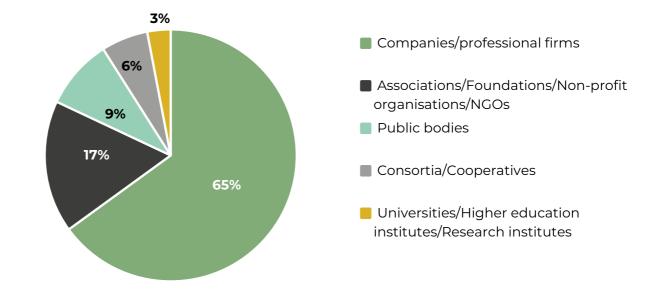
In the same year, the University entered into new Framework Agreements with a number of companies, including AUTOSTRADE PER L'ITALIA, COESIA, IMA, among others. Joint Research Laboratories were also created with Ferrari SPA, IMA and FEV ITALIA S.R.L. Other Framework Agreements were entered into with Associations and Consortia, including CNA Bologna and Colibrì Consorzio Ospedaliero, and new partnerships were established with public institutions, such as the Italian Navy and the Italian Public Property Agency.

As to company personnel training, long-term agreements aimed at skill development are in place with companies such as Lamborghini, Philip Morris, HPE Coxa, Assinter and IEG. In the institutional area, a framework agreement covering a number of fields, from urban regeneration to digital innovation in public services, was entered into with Comune di Bologna.

Various projects with a number of partners were also launched, including the Digital Twin in Bologna. Other agreements were renewed in a variety of areas of scientific and technological research, with institutions such as the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the National Research Council (CNR) and the Italian Space Agency (ASI). As a whole, in 2023, around 13,000 agreements for curricular internships were in place, including 3,388 new agreements. 239 agreements involved international facilities.

Figure 79 – Agreements for curricular internships in 2023







UNIBO FOR GARISENDA

In 2023, the Bologna municipal authority launched phase two of conservation works at the Garisenda Tower, by identifying a group of nationally renowned experts. The project is coordinated by engineer Raffaela Bruni. The team includes Massimo Majowiecki, professor of Structural Engineering at the University of Bologna, who will participate together with his Studio di Progettazione Strutturale; Francesco Ubertini, full professor of Structural Mechanics at the University of Bologna; and Nunziante Squeglia, from the Department of Civil Engineering of the University of Pisa. On 17 August 2023, the agreement between the DICAM Department and Comune di Bologna was renewed, regarding the interpretation of long-term and experimental data on the static and dynamic structural behaviour of the Asinelli and Garisenda Towers. Ultimately, an additional agreement for the monitoring of the two Towers was signed between the municipal authority and the University, under which the University will use its expertise for consolidation and restoration work, as well as to develop research projects and conduct academic tests. A mathematical model of the Garisenda Tower will be developed. This 'digital twin', part of the larger digital twin of the city of Bologna, will provide real-time behavioural predictions that will update and communicate with the monitoring system of the tower.

AGREEMENTS FOR THE ACTIVATION OF PRACTICAL EVALUATION INTERNSHIPS (TPVS) NECESSARY TO QUALIFY FOR PROFESSIONAL PRACTICE WITHIN VOCATIONAL DEGREE PROGRAMMES

The new vocational degree programmes in Mechatronics, in Chemical Methodologies for Products and Processes, in Information Systems Technology, in Polymeric Composite and in Techniques for Construction and Land were updated in 2023 and converted into programmes that qualify for professional practice as graduate industrial technicians. For this purpose, the universities of Emilia-Romagna have entered into a dedicated agreement with the Italian National Board of Industrial Technicians and Graduate Industrial Technicians and with the local Professional Orders of the provinces of Bologna, Ferrara, Forlì-Cesena, Modena, Parma, Piacenza, Reggio Emilia, Ravenna and Rimini, thus establishing a partnership to activate internships at professional firms. This includes performing and being assessed in a Practical Evaluation Internship (TPV), necessary to qualify for professional practice, as well as receiving deontological training, passing a Practical Evaluation Test (PPV) and participating in the final graduation session. The local Professional Orders, in particular, will play an active role in guiding training within the qualifying vocational degree programmes, appointing tutors to assess the consistency of the TPV with the areas of specialisation relevant to the sections of the professional register for which candidates qualify.



GRUPPO AUTOSTRADE PER L'ITALIA

In October 2023, a five-year Framework Agreement was signed with Gruppo Autostrade per l'Italia to launch joint initiatives in the areas of research, technology transfer and sustainable mobility, with a focus on training, career guidance and social innovation. The University and Gruppo Autostrade have a long history of collaboration that has led them to sign numerous research contracts and the Group to co-finance, during the 2022/23 academic year, a scholarship for the National PhD on Photovoltaics, focussing on research on the integration of innovative photovoltaic systems in microgrids coupled with storage systems for decarbonising road networks. The new agreement strengthens the partnership and defines future projects, including innovative photovoltaic technologies for highways, new storage systems in service areas and wireless on-the-move charging systems for electric cars, as well as sensors for remote monitoring of road surface deformations.

I.M.A. SPA

A five-year agreement with IMA SpA was signed in May 2023, aiming to foster the development of multidisciplinary projects in the fields of research, innovation, technology transfer, entrepreneurship, teaching, career guidance, internationalisation, development cooperation, sustainability and social innovation. The University and the company have a long history of collaboration in research projects of high scientific and industrial value, focussing on topics such as additive manufacturing, big data, robotics, mechatronics, cybersecurity and predictive maintenance. This partnership also encompasses the BI-REX Competence Centre for Industry 4.0, the University Recruiting Days, and several curricular and postgraduate internships hosted at the company. Among the main goals of the agreement is the creation of a Joint Research Laboratory devoted to promoting, coordinating and conducting collaborative research, commissioned research or research financed through competitive calls at a regional, national and European level, in the areas of mechatronics, robotics and artificial intelligence, with a focus on applications related to the design and control of machinery and automated lines, as well as on the environmental sustainability of products and processes.

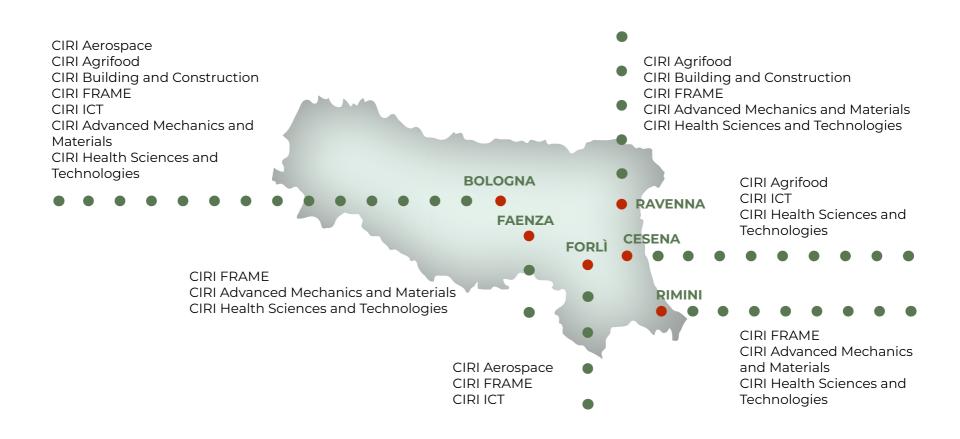
JOINT RESEARCH LABORATORY WITH FERRARI AND NXP

From the long and strong collaboration between the University and Ferrari comes E-Cells Lab, a cutting-edge electrochemical laboratory where PhD students, researchers, teachers and research staff will develop study and research projects of high technical and scientific value. Thanks to state-of-the-art instrumentation and the synergy between academic and industrial expertise, the laboratory aims to explore the potential of Solid-State Battery (SSB) and Advanced Solid-State Battery (ASSB) lithium cells. Focussing on fast charging, safety and high cell performance, advanced electronic devices will be developed for controlling the charging/discharging cycles of the cells. The results achieved will be useful for Ferrari in improving communication with battery suppliers, for the University in consolidating its international reputation in materials research and electrochemical energy storage, and for NXP in developing next-generation battery sensing and control systems.

High Technology Network

The University of Bologna's **seven Interdepartmental Research Centres (CIRI)** and the Laboratories accredited by Regione Emilia-Romagna aim to carry out and coordinate research to strengthen ties with the industry, popularise research findings and facilitate technology transfer in order to meet the needs of the production sector.

The CIRIs enter into agreements with external research centres and institutes and other universities, both within and outside the country, as shown in the table. The seven CIRIs were recently joined by the Research



Centre on Cultural and Creative Industries (CRICC), which seeks to strengthen the regional production system in the CCI sector by integrating research, digital and enabling technologies. In 2023, the INT.TUR section of the Centre for Advanced Studies in Tourism, which deals with industrial research and technology transfer for the development of products, processes and services for businesses and stakeholders in the tourism industry, also received accreditation.

Table 24 - Agreements with external research centres

Research centre	Agreement	Duration
Italian Space Agency	2022-5-HH.0 "Operational navigation of Cube- Sat missions in Deep Space"	1.5 years
Italian Space Agency	2022-8-HH.0 HERA Mission "Scientific activities for the HERA Mission"	3 years

In 2023, all ongoing industrial research projects continued, and a €2,800,000 research project funded by Eni S.p.A. was launched to set up a joint laboratory where research on decarbonisation and energy transition will be carried out.

The **CIRIs' for-profit activities** continued in 2023 too, confirming their good results in terms of contracts signed with companies not only within the Region, but also nationally and internationally.

Table 25 - CIRI results

Competitive research projects	Ongoing projects	Amount
Total projects	83	€11,760,000
National	11	€450,000
Regional	65	€9,732,000
International	7	€1,578.000

Research contracts with companies	Contracts	Amount
Total contracts national, regional and international	86	€2,330,000

Intellectual property and patents

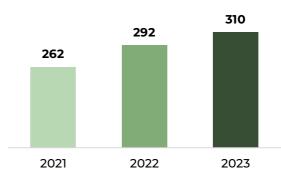
The University promotes the protection and **exploitation of intellectual property**, supporting innovation and technology transfer, with the aim of bridging research and society and connecting the supply of skills and technologies with market demand and community needs. In 2023, activities focussed on various areas:

- Patent and other Intellectual Property (IP) portfolio management, comprised of around 260 patent families and plant varieties, totalling about 840 patents/plant varieties. During the year, 29 new patents/software and six new plant varieties were registered and 47 international extensions were granted.
- Promotion and exploitation of IP titles, mainly patents and plant varieties, through ten confidentiality agreements and 12 licensing agreements.
- Protection and exploitation of other research results, such as software and databases, with 15 research results under management and three licensing agreements.
- Participation in Strengthening Technology Transfer Offices Italian Ministry of Economic Development projects (Feed-KT and ExploitAction), with submission and approval of the projects for refinancing until 30 June 2025.
- Coordination and support of ongoing projects within the Unibo Proof of Concept (PoC), with funding of 18 projects through the AlmaValue Call "Scouting of Alma Mater research results and support for their promotion on the market".
- Coordination and support of projects under the AlmaValue for RR programme, within the Proof of Concept of the Italian Ministry of Enterprises and Made in Italy, which received funding for €480,000.
- Participation in the Breeding project to support research to create new plant varieties.
- Collaboration with Farming Future S.r.l. based on a Partnership Agreement for participation in the Agrifood Tech National Technology Transfer Hub, promoted by Cassa Depositi e Prestiti's CDP Venture Capital.



The University protects its patents. A patent is a legal instrument that restricts the use of an academic invention, protects technology produced in the University and exploits the results of scientific research. In 2022, the University of Bologna filed 103 patent applications (including for plant varieties, software, trademarks). As at 31 December 2022, the University has 291 patent families.

Figure 80 – Patent families



New entrepreneurship

The University of Bologna is strongly engaged in supporting new entrepreneurship through various initiatives, especially as regards **spinoffs and startups**.

The **Regulations on spinoffs and startups** provide for the possibility of accrediting as University spinoffs those businesses that market the results of research carried out by teachers and researchers at the University. The Regulations also give students the opportunity to accredit their innovative entrepreneurial projects as University startups.

At the end of 2023, the University of Bologna had 59 accredited companies, i.e. 43 spinoffs and 16 startups. Seven new companies were accredited, while four existing ones no longer qualified for accreditation. The University has an interest in 23 of its 43 spinoffs. 14 spinoffs are owned by the holding company BeHold (which holds shares in the University of Bologna's investees).

The University of Bologna launched several initiatives to support the dissemination and development of entrepreneurial culture, including:

- Welcome PoC and PoC Academy: two cycles of meetings to support business creation and exploit research results. The meetings accompany the projects selected under the AlmaValue Call, which awards funding to the best entrepreneurial projects submitted by the University of Bologna's teachers and researchers.
- **Programma di Accensione Imprenditoriale PDAI**: a training and support session for developing business ideas, targeting the projects selected within the University of Bologna Call for StartUps.
- Call for StartUps: a call for students aimed at selecting emerging or ongoing entrepreneurial projects that are ready to access growth and acceleration paths. Overall, 116 business projects were submitted in 2023, from which 30 were selected and three startups were created.
- Call for Players: an initiative to strengthen student business teams by engaging other students who wish to join
- **StartUp Day**: an event to bring skills together and develop youth entrepreneurship, with a view to strengthening the students' entrepreneurial proposals. Over 1,700 participants took part in the event, which in 2023 was held at Palazzo Re Enzo in Bologna.
- Open Innovation Programmes (CBI and CBI.Attract): initiatives carried out in collaboration with Almacube to develop innovative projects and ideas by engaging students from various universities in Emilia-Romagna.
- Awareness-raising workshops and events on entrepreneurial culture, in partnership with local foundations and private businesses.
- The University of Bologna further supports the development of project work in various course units, thanks to the ALMALABOR prototyping laboratory (MakerSpace).



Lastly, a number of initiatives supporting entrepreneurship were carried out with regional and local partners within strategic University projects such as ECOSISTER and CTE – House of Emerging Technologies.

Externally funded PhD programmes

The University of Bologna's engagement with the local community is also evidenced by the remarkable number of PhD scholarships funded by third parties (organisations, other universities, the Italian Ministry of Foreign Affairs, Marie Curie and Erasmus Mundus; starting from the 35th cycle, PhD scholarships financed entirely by Departments with funds from other organisations are also included). Having regard to the 39th PhD cycle, this source of funding accounts for approximately 40% of the total number of scholarships, with 142 scholarships funded by third parties and 216 by the University (170 of which are partly funded by the Italian Ministry of University and Research, and 46 of which are entirely covered by funds from the University's research structures, mainly Departments). In the 39th cycle, 329 scholarships were also awarded under the NRRP, 113 of which were co-financed by companies.

Sponsors and banking foundations

Sponsors such as Fondazione Flaminia, Ser.In.Ar and Uni.Rimini actively engage in the development of the areas where the Romagna Campuses are located. Their mission is to promote university, scientific research and higher education to foster social, economic and cultural development in Romagna. In 2022, the Italian Association of Banking Foundations and Regione Emilia-Romagna signed a memorandum of understanding to build on the peculiarities and expertise of each territory, with a focus on the reduction of disparity in educational and employment opportunities and access to public services.

- Fondazione Flaminia
- Fondazione del Monte di Bologna e Ravenna
- Fondazione Cassa di Riparmio di Cesena
- Fondazione Cassa di Riparmio di Bologna
- Fondazione Cassa di Riparmio di Imola
- Fondazione Cassa di Riparmio di Forlì
- Ser.In.Ar
- Uni.Rimini



Lifelong learning and postgraduate education

In the area of **lifelong learning and postgraduate education**, a range of different activities aim to meet the needs of the local social and business worlds. These include postgraduate programmes and lifelong learning programmes, Summer and Winter Schools for newly graduates and professionals seeking refresher training that earns them credits, and bespoke training courses requested by companies to improve their employees' skills. In the 2023/24 academic year, 65 courses were activated in total, including 23 postgraduate programmes (CAFs), 25 lifelong learning programmes (CFPs) and 17 Summer and Winter Schools (SWSs).

Having regard to **company personnel training**, long-term agreements are in place with companies such as Lamborghini, Philip Morris, HPE Coxa, Assinter and IEG, which aim to develop technical skills and train employees in new technologies. In addition to these partnerships, a number of single course units are available too. This process was expanded during the year, with more than 300 employees trained, totalling about 400 hours across 16 bespoke courses.

Eight **projects linked to national and international funding opportunities** for strategic learning initiatives were launched, mainly in the Education area of Knowledge and Innovation Communities, in which the University of Bologna is a partner. The projects are devoted to digital transition and environmental sustainability topics, with a focus on the manufacturing and agrifood industries. Lastly, an experimental project was launched on the **UniBook platform**, offering online and asynchronous lifelong learning on the digital world and climate change contrast/adaptation in the manufacturing context of Emilia-Romagna. Two pilot courses were delivered in 2023.

TEACHER TRAINING CENTRE

The **Teacher Training Centre (CFI)** was set up in 2023 as part of the university and academic induction training pathway for new teachers in lower and upper secondary schools defined by the Italian Ministry. The Centre designs and plans training for future teachers based on the annual needs identified by the Ministry. Training pathways are built in cooperation with the Departments and directors are appointed based on their sectoral expertise and in line with the content of training. Pathways are assessed by the Regional Education Office, which also contributes to designing the internship plan and is responsible for the initial and periodic accreditation procedure to check consistency with competition classes and compliance with the quality and sustainability of training. The CFI is headed by a coordinator and supported by a scientific officer and an administrative manager. The decision-making body also includes the directors of the pathways and an executive of the Regional Education Office. For details about the programme catalogue, which is updated every year according to the requests of the Ministry, please visit the CFI website.

7.2 INTERNATIONAL DIMENSION

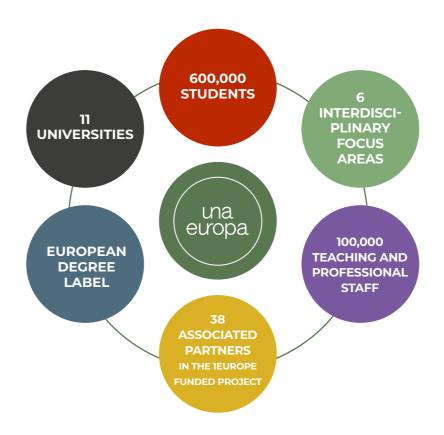
A key pillar of the University's institutional activity, internationalisation is characterised by a targeted and differentiated approach that, starting from Europe, increasingly broadens its scope. The University actively engages with an increasing number of institutions in several countries, through strategic partnerships, participation in international networks, agreements, exchanges and mobility at all levels, joint projects funded under national and international competitive programmes and with internal resources.

Una Europa - European University Alliance

Una Europa is a European university alliance founded in 2018, which has created close synergies and innovative scenarios on the higher education and scientific research front. It aims to create a European university campus. The Alliance currently consists of prestigious European universities, including Freie Universität Berlin, Alma Mater Studiorum – Università di Bologna, University College Dublin, University of Edinburgh, Helsingin yliopisto, Universiteit Leiden, Uniwersytet Jagielloński w Krakowie, KU Leuven, Universidad Complutense de Madrid, Université Paris 1 Panthéon-Sorbonne and Universität Zürich.

The Alliance's activities have been **funded by the European Commission** through projects for the creation of innovative teaching, joint training and public engagement paths on six focus areas: Europe and the World, Sustainability, Cultural Heritage, Data Science and Artificial Intelligence, One Health and Future Materials. This fosters the mobility of students, teachers and professional staff between the Alliance sites. Joint strategies for research and innovation, the sharing of infrastructure and resources, and strengthening of the human capital are also in place.

The Una.Futura project, launched in December 2022, will guide the activities of the Alliance over the four-year period 2023-2026 with a view to creating an integrated management system for the European campus of the future, with a specific focus on the active engagement of students and staff. Special emphasis is placed on the role and training of professional staff. Since its foundation, the Alliance has promoted innovative forms of mobility and training of not only academic, but also professional staff, by means of three staff weeks (online in 2021, with 150 participants, blended in 2022, with 31 participants, in person in 2023, with 52 participants) and the implementation of a job shadowing scheme called Live my Life (three editions, 134 participants), facilitating the exchange of experiences between staff from different administrative divisions of the partner universities.



Cooperation projects, agreements and activities

The University of Bologna is actively engaged in the internationalisation process through a wide variety of **cooperation, curriculum development and capacity building projects around the world**. The University is particularly active in the EU, Central and Eastern Europe, Central Asia, North Africa, the Middle East, China, Southeast Asia and South America. In 2023, 119 programmes and projects were ongoing, and the University acted as coordinator in 42 of them.

The University of Bologna ranks among the top universities in Europe for the high number of incoming and outgoing exchange students under the Erasmus+ Programme and for the significant amount of funding received. In addition to the many bilateral agreements that translate into teacher and student exchange projects, the University actively participates in 68 international projects funded under the Erasmus+ Programme, focusing on teaching innovation, social inclusion and cooperation with local institutions, in partnership with

European and international organisations. Of these 68 projects, 28 are coordinated directly by the University of Bologna. In 2023, three new projects funded by the Italian Agency for Development Cooperation were launched, dedicated to global citizenship education and in collaboration with civil society organisation, with a focus on youth. Another similar project is ongoing, aiming to define governance models and good practices for local authorities, especially the Regions.

In 2023, a new capacity building project was launched in the **Western Balkans**, namely in Montenegro and Kosovo, together with a project funded by the DG International Partnerships of the European Union for the training of public administration officers in Albania. Activities also continued on a project focussed on strengthening the capacity of four Albanian universities to do innovative research in the field of cultural heritage conservation and restoration.

In 2023, three new capacity building projects were launched in **Africa**, involving universities in Botswana, South Africa, Kenya, Nigeria, Zambia, Ghana and Mauritius. Two of these originated from ongoing intra-African projects dedicated to laser-based manufacturing and space science, while the third one, newly designed, will examine and test participatory processes for the implementation of the 2030 Agenda. These initiatives have joined two ongoing projects on one health in South Africa and on energy in Egypt. Moreover, in 2023, eight international development cooperation projects were active through the Unibo Global South programme, promoted by Departments in partnership with local players, involving a number of sectors and African countries. Lastly, the University has renewed its commitment to the programme to strengthen the Somali National University and to the Italian Higher Education with Africa (IHEA) Foundation.

In **Asia and the Middle East**, in 2023, the University was engaged in capacity building projects funded by the European Union in Azerbaijan, the Philippines, India, Indonesia, Iraq, Laos, Lebanon, Syria and Pakistan, aimed to support higher education in the areas of governance, internationalisation, teaching, research and collaboration with society. An ongoing youth capacity building project in Turkey, Lebanon and Jordan continued too. The University also participates in development cooperation initiatives in Palestine on wastewater and inclusion in education, with funding from the European Union, Regione Emilia-Romagna and the Italian Agency for Development Cooperation. Through Unibo Global South, it is involved with its own funds in projects to combat energy poverty in Syria and on collective memory in post-conflict societies in Lebanon. Lastly, within the establishment of the Italy-Azerbaijan University, it is working with ADA University (Azerbaijan) on the construction of a new School of Agriculture and Food Science, promoting knowledge, technology and innovation transfer between the two countries.

North America has 39 agreements in place with the University of Bologna, facilitating student and academic staff mobility and promoting teaching and research collaborations. Cooperation with some U.S. institutions has also led to the creation of Study Centres in Bologna that play an important role in the social and cultural integration of U.S. students and provide guidance to the University of Bologna's students in the United States. Among the U.S. institutions and consortia with which the University of Bologna partners in Bologna are the Bologna Consortial Studies Program (B.C.S.P.) and Eastern College Consortium (E.C.C.O), University of California, Dickinson College, Brown University, and the Bologna Center of the Johns Hopkins University.



During 2023, the University of Bologna was engaged in three capacity building projects in **South America**: one of them focusses on building training pathways on migration management and migrant rights in Colombia, Peru and Ecuador; one aims to improve the quality of teacher training in Mexico, Ecuador, the Dominican Republic, Panama and Brazil; the third one, just launched, is dedicated to enhancing research, innovation and knowledge sharing on climate change and tourism in Colombia, Panama and Argentina. The NEST2020 project continued in 2023. Funded by the Italian Agency for Development Cooperation (AICS), it seeks to consolidate the Network of Education on Sustainable Tourism, involving industry operators in Bolivia, Cuba and El Salvador. At the same time, a project funded by AICS and providing Technical Support to Public Policies in agriculture was launched in Colombia.

International networks

The University of Bologna is a member of several **international networks** that aim to promote cooperation in various fields and to foster the development of a European area of higher education and research. Among the main groups of associations and networks of which the University is a member in 2023 are:

European university association

the europaeum https://europaeum.org/

International association of universities

Scholars at risk network

The guild

Sustainable development solutions network

Coimbra universities group

<u>Unimed</u>

Utrecht network

Uniadrion



Magna Charta Universitatum Observatory

In 2023, the Magna Charta Universitatum MCU2020 celebrated its anniversary at the University of Lodz; the theme was Universities and Re-Construction of Cities: the Role of Research and Education. The Magna Charta Universitatum was signed in 1988 on the occasion of the 900th anniversary of the University of Bologna. The document highlights the fundamental principles of all universities: institutional autonomy and academic freedom, moral and scientific independence from all political and economic influence, inseparable nature of teaching and research, social responsibility and international cooperation. The Magna Charta was initially signed by 388 university rectors from all over the world and subsequently endorsed by many other academic institutions, totalling 975 universities in 94 countries worldwide. The Magna Charta Universitatum Observatory was established in 2001 to promote the values affirmed in the Magna Charta Universitatum. The Observatory organises and participates in various international events, focussing on the values of the Magna Charta and on current academic issues on a regional basis. These include "The Responsive and Responsible University" and "The roots of academic freedom - Underlying values and human rights perspectives" online seminars, as well as a dedicated session during the IAU General Assembly. The Observatory also participated in initiatives organised by international networks and universities. A research project was launched and several universities selected by the MCO are currently working together to develop and implement their own projects, so as to become more responsive and responsible. Lastly, a student competition was run to encourage appreciation for the MCU values: 97 proposals were submitted and five essays were selected and presented at the anniversary conference.

THE UNIVERSITY OF BOLOGNA FOR PEACE

In conducting its academic activities, the University of Bologna is **inspired by the principles of peace and dialogue** and promotes initiatives that are in line with these values. This is why the University firmly condemns and unequivocally rejects the invasion of Ukraine and watches in concern as the humanitarian crisis continues. The University is fully committed to taking concrete actions to support students and members of the academic community who are victims of the war, and in favour of the Ukrainian population as a whole. These actions include the option for Ukrainian students of registering for single course units and taking online exams, the hosting of Visiting Fellows, voluntary language assistance and psychological support. Various scientific initiatives were also organised to better understand the current situation. Likewise, the University of Bologna has launched a series of projects aimed at investigating the Iran crisis, seeking to analyse the events through a historical, sociological and political lens. The goal is to provide the tools necessary to understand current events, keep the focus on the Iranian situation and express solidarity to those who are fighting and suffering for freedom.



7.3 PUBLIC ENGAGEMENT

The University of Bologna's public engagement seeks to **make tangible the creation of value for society and the common good** in all areas of knowledge in which the academic community is involved through teaching and research. In liaising with various actors in society, the University sets the conditions for new needs and emerging challenges to be addressed through knowledge and research, by developing innovative projects in collaboration with its students.

FINANCIAL HELPDESK PROJECT - COMUNE DI BOLOGNA

In partnership with Fondazione Innovazione Urbana, a project was developed to set up a Helpdesk open to the public, providing free personal finance advice and education. The service will be available at the Case di Quartiere (community centres) in the city of Bologna.

During 2023, the University of Bologna worked on the first phase of the project, which consisted of a training course on finance education that involved 20 students selected through a call for applications. Students acquired knowledge and tools necessary for the next phase, which involves curricular internships with Fondazione Innovazione Urbana to design the finance advice service. The third and final phase of the project, scheduled for the end of 2024, will envisage the opening of Helpdesks providing finance education at the Case di Quartiere in Bologna and potentially involve the students trained in the course of the project.

The value of the project lies in creating a model capable of meeting emerging local needs and promoting new collaborations between the institutions involved and the University of Bologna, which has helped conceive and co-design the service.

Enhancement of research

The **popularisation of research** conducted at the University of Bologna is one of the most significant goals of taking **social responsibility**, helping citizens understand the far-reaching impact that the academic community's activities have on the progress, growth and well-being of society as a whole.



PHD STORYTELLING

In 2023, the PhD Storytelling project was consolidated, whose aim is to create opportunities for sharing knowledge and for public dissemination of research conducted by PhD students. For this purpose, the PhD students of the University of Bologna took part in a training course on oral and written storytelling, including testimonies, experiences and workshops on science popularisation, with a view to acquiring skills and tools to present their own research in a way that is comprehensible to a lay audience. Once again, the initiative involved qualified technical partners, such as the Unione Giornalisti Italiani Scientifici (Italian Science Journalists' Association – UGIS) for written dissemination and ART-ER (Attractiveness Research Territory), a consortium company of Emilia-Romagna, for oral skills. At the end of the course, the dissemination articles written by the project participants on their research were published in UniboMagazine and on the UGIS website. The participants were also involved in the organisation of the festival "Generazioni: la ricerca incontra la città" (Generations: research meets the city), consisting of five events open to the public and dealing with topical scientific issues, held at Piazza Coperta in the Salaborsa Library, in collaboration with Salaborsa – Libraries and Cultural Welfare Department of Comune di Bologna.

WAITING FOR THE EUROPEAN RESEARCHERS' NIGHT

The schedule of events that take place between July and September, **prior to the European Researchers' Night**, includes a number of initiatives on scientific and cultural themes of interest for the general public and for schools. In 2023, the University of Bologna designed, organised and participated in 23 events in Bologna and on its Campuses, which took a variety of forms: from science happy hours to guided tours, from conference shows to debates, to meetings with the University's researchers at schools, also in cooperation with an established network of stakeholders and 'friends of the Night'. Lastly, in spring and autumn, the consortium designed two science popularisation pathways on current issues for upper secondary school teachers.

THE EUROPEAN RESEARCHERS' NIGHT

The European Researchers' Night is a Multicampus event dedicated to research and aimed at the younger generation, university students, schools, families and children. In 2023, it involved some 450 researchers in Bologna and the cities where the Romagna Campuses are based (Cesena and Cesenatico, Forlì, Ravenna, Faenza and Rimini). The aim was to take research-generated knowledge outside scientific facilities and laboratories, showcasing the many academic disciplines of the University of Bologna and their applications in everyday life in an experiential, fun and stimulating way. The main theme of the 2023 edition was "RiPENSAci" (Think again), encouraging reflection on established habits, acquired knowledge and certainties in order to face the challenges that society poses to us through the glasses of research. According to the almost 400 surveys completed, 55% of participants had never attended the event before, which shows both good information and continuity in participation. Moreover, 83% of survey respondents stated that the event significantly expanded their scientific knowledge. Participants also appreciated the content presented, clarity of the language used and general atmosphere of the event.



AGREEMENT WITH THE CULTURAL ASSOCIATION FUN SCIENCE: UNIJUNIOR. "CONOSCERE PER CRESCERE" PROJECT

In 2023, the agreement with the cultural association FUN SCIENCE was renewed to continue the **Unijunior**. **Conoscere per crescere** (Knowledge for growth) project. This project, now in its thirteenth edition, is a children's university for girls and boys aged 7 to 13. Two editions were held in 2023, one in spring and one in autumn. The young participants were invited to attend lectures specially designed for them by our teachers in the halls of the University in Bologna. With a view to training the citizens of tomorrow, the study plan included a wide range of disciplines, such as computer science, engineering, physics, oceanography, geology, zoology, economics, history, drama, linguistics, chemistry, palaeontology, biology, pharmacy, astronomy, philosophy and sociology. Between spring and autumn, more than a thousand children attended the university, and 60% of them were new students.

LABO2030

A project was launched to engage secondary school students in research that contributes to **achieving the 17 Sustainable Development Goals of the 2030 Agenda**. The last step of LaBo2030 was a debate in a public hall in the city between two teams of young people supporting two different research works that share the same SDG covering non-traditional topics in education. The debate, subject to specific rules and time limits, was prepared together with researchers during a series of meetings aimed at critically reworking support material, allowing students to acquire certain transferable skills such as public speaking, critical thinking, education to listening and teamwork.

"SILVA. STORIE PER UN PIANETA DA CURARE" AND ALMASOUND, L'IMPEGNO DELLA RICERCA PER IL BENESSERE DELLA SOCIETÀ

In 2023, two new podcast series expanded the range of content dedicated to research and available on the Spreaker channel of the University of Bologna. The main purpose was to disseminate and promote results, initiatives, cultural resources and innovative experiences originating from research through engaging and effective storytelling. Silva. Storie per un Pianeta da curare (Stories for a planet to heal) brought writers, poets and scholars together with researchers of the University to explore the topic of ecology and discuss the role of literature and poetry in raising awareness of environmental issues. AlmaSound. L'impegno della ricerca per il benessere della società (Research for the well-being of society), on the other hand, focussed on innovative research works from different disciplines, offering potential solutions for environmental, social and cultural challenges.

The University of Bologna supports the development of social innovation initiatives by using its learning pathways and research to develop programmes of public interest and contribute to the generation of innovative ideas aimed at meeting social needs and establishing new relationships and partnerships. This requires an open dialogue with citizens, associations and institutions, in order to identify the areas in which cooperation can provide effective answers. Students, teachers and staff are engaged in open innovation paths, applied research and co-production of knowledge, ranging from projects concerning waiting rooms in hospitals and clinics, to residential treatment facilities and young caregivers.

Polo Penitenziario Universitario

For a long time now, the University has been committed to guaranteeing the **right to higher education of students in prison or on probation**. To this end, a project called Polo Universitario Penitenziario (PUP – University Penitentiary Hub) was launched to make access to university education easier by setting up a dedicated space within the Bologna prison and arranging a series of activities aimed at supporting and facilitating higher studies for inmate students. The Bologna PUP is managed by 27 tenured professors from various Departments, with the support of 50 volunteers among professors, non-professors and retired professors, and 60 student volunteers.

At the end of 2023, the Bologna PUP student community had 65 members, including students transferred to other facilities or on probation and two young adults committed to the Bologna youth detention centre. PUP students are enrolled in 18 different degree programmes, including two second cycle degree programmes. Below is an overview of the main subject areas in the 2023/24 academic year.

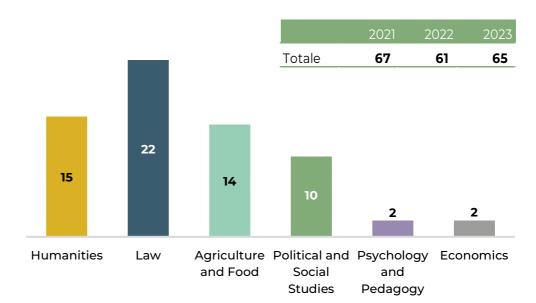
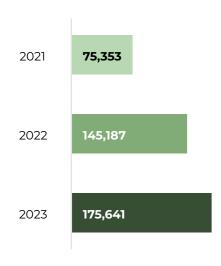


Figure 81 - PUP students by field of study

With as many as 19 new students in the 2023/24 academic year, the University of Bologna's Polo Universitario Penitenziario is a success story that, in terms of students involved, consistently ranks at the top among the almost 40 hubs currently operating at as many Italian universities (more details: https://www.crui.it/cnupp.html).

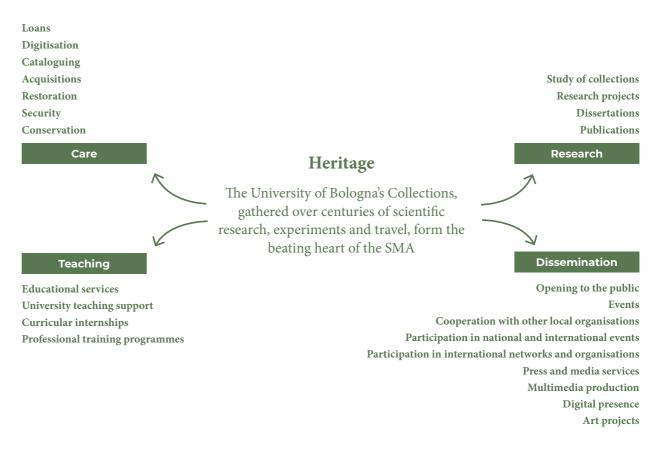
7.4 CULTURAL HERITAGE

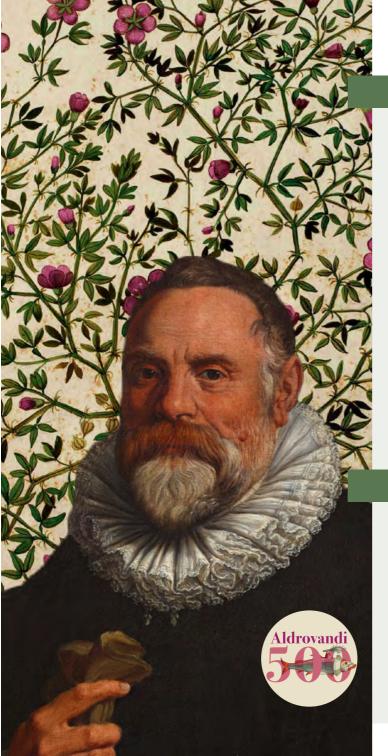
Figure 82 - Museum visitors



Museums

The **University Museum Network** (**SMA**) is comprised of 15 structures, including museums, collections and a digital museum space. The SMA actively engages in teaching activities for schools and in the protection of assets through conservation, restoration and cataloguing actions, in order to ensure the enhancement and accessibility of collections also for research and learning purposes. The SMA further promotes public engagement activities and the dissemination of scientific culture in partnership with national and international, public and private institutions. The SMA's projects integrate current issues of awareness-raising and dissemination of sustainable practices, in line with the goals of the 2030 Agenda. To maintain an open and ongoing dialogue with the public, the SMA uses digital communication tools that enable a new approach to museum heritage.





THE 500TH ANNIVERSARY OF THE BIRTH OF ULISSE ALDROVANDI

The 500th anniversary of the birth of Ulisse Aldrovandi

In 2023, the celebrations of the 500th anniversary of the birth of Ulisse Aldrovandi continued with an extensive schedule of events, including the exhibition "L'altro Rinascimento: Ulisse Aldrovandi e le meraviglie del mondo" (The other Renaissance: Ulisse Aldrovandi and the wonders of the world).

The exhibition MENTE ET MALLEO. DA ULISSE ALDROVANDI A GIOVANNI CAPELLINI: STORIE DAL PRIMO MUSEO GEOLOGICO (From Ulisse Aldrovandi to Giovanni Capellini: stories from the first geological museum) was held at the Geological Collection "Giovanni Capellini Museum" and explored the curiosities that fascinated both Aldrovandi and Capellini.

During ARTEFIERA, the Specola Museum of Astronomy hosted an installation by **Cuoghi Corsello**, a reflection around Aldrovandi's treatise *Monstrorum historia* and his interest in astronomy and 'celestial monsters'.

The exhibition **OLTRE LO SPAZIO**, **OLTRE IL TEMPO**. **IL SOGNO DI ULISSE ALDROVANDI** (Beyond space, beyond time. Ulisse Aldrovandi's dream), produced by Fondazione Golinelli and the SMA, displayed immersive and interactive exhibits from museum collections, works of modern art and objects of the European Space Agency.

The cycle of guided tours **TESORI NASCOSTI. ALLA SCOPERTA DELL'ERBARIO** (Hidden treasures. Discovering the Herbarium) allowed visitors to explore the Herbarium of the University of Bologna, normally closed to the public.

IL MUSEO. UNA STORIA MONDIALE (The museum. A world story), promoted with the Department of History and Cultures – DISCI, brought together cultural historian Krzysztof Pomian and a number of special guests.

Pomian was also awarded the SIGILLUM MAGNUM after his lectio magistralis on Aldrovandi and curiosity.

The exhibition **ANIMALI FANTASTICI E MOSTRUOSI** (Fantastic and monstrous beasts) explored the world of Aldrovandi's fantastic creatures, in collaboration with the Department of Veterinary Medical Sciences and University of Liverpool.

Lastly, the show IL COLLEZIONISTA DI MONDI. VITA E SCIENZA DI ULISSE ALDROVANDI (Collecting worlds. Life and science of Ulisse Aldrovandi), promoted with the Bologna University Library, closed the celebrations.

"L'ALTRO RINASCIMENTO: ULISSE ALDROVANDI E LE MERAVIGLIE DEL MONDO"

The exhibition "L'altro Rinascimento: Ulisse Aldrovandi e le meraviglie del mondo" (The other Renaissance: Ulisse Aldrovandi and the wonders of the world), produced by the University Museum Network with the Bologna University Library, was held between 8 December 2022 and 10 April 2023 and then extended until 28 May 2023 at the Museum of Palazzo Poggi.

With over 33,300 visitors, the exhibition attracted around 9,000 young people aged between 6 and 26. A satisfaction survey showed that 89.3% of visitors found the exhibition useful to understand Aldrovandi and his contribution to natural science.

In the wake of the exhibition, a new section focusing on Aldrovandi was inaugurated at the Museum of Palazzo Poggi, giving access to many cultural treasures of the University of Bologna that had never been on display before, including ancient maps, illustrated volumes and Aldrovandi's naturalistic collection, together with immersive video projections and digital installations.

Finally, within the NRRP Spoke 4 Virtual technologies for museums and art collections, the digital twin of the exhibition was created, thus making it available in digital format at all times. For further information, please visit the website dedicated to the celebrations.

2023 EVENTS

ART CITY BOLOGNA During the city festival, the Botanic Garden and Herbarium presented "Menage a deux – Menage a tous" by Alessandro Brighetti, an exhibition that examines the human impact on the environment without falling into negativity or moralism. (31 January – 5 February 2023)

DARWIN DAY A schedule of events celebrating Charles Darwin's birth, focussing on the theme "Altre evoluzioni – Tutelare l'evoluzione di piante e animali in ambienti antropizzati, danneggiati, minacciati" (Other evolutions – Protecting the evolution of plants and animals in anthropic, damaged and threatened environments). (9-23 February 2023)

CALEIDOSCOPIO GIAPPONE The fifth edition of the cycle of conferences, events and educational activities aimed at disseminating Japanese culture, art and traditions. (17 February – 4 March 2023)

ERCOLE SI RACCONTA. QUATTRO CONVERSAZIONI SULLA STATUA SIMBOLO DI PALAZZO PO-GGI (Hercules on Hercules. Four conversations on the iconic statue of Palazzo Poggi) A series of meetings to discuss cultural heritage protection, on the occasion of the restoration of the statue of Hercules Resting, sculpted by Angelo Gabriello Piò in 1720 and today in Palazzo Poggi. The restoration was sponsored by Lavoropiù. (15 February – 31 March 2023)

SMATINÉE. COLAZIONE IN COLLEZIONE Guided tours to get to know the collections of Palazzo Poggi and enjoy the sunrise from the Specola terrace, followed by a breakfast at the museum. (10 and 24 May, 14 June 2023)

A UN PASSO DALLA LUNA... OSSERVAZIONI AL TELESCOPIO DALLA TORRE DELLA SPECOLA (A step away from the Moon. Telescopic observations from the Specola Tower) Four evenings of astronomical observations from the beautiful terrace of the Specola Tower, the ancient seat of the Bologna astronomical observatory. (21, 24, 25 and 26 July 2023)

2023 EXHIBITIONS

VERITÀ E ILLUSIONE. FIGURE IN CERA DEL SETTECENTO BOLOGNESE

Organised by the Civic Museums of Ancient Art in partnership with the Museum of Palazzo Poggi, it was the first exhibition held around the city on the art of wax sculpting in the 18th century (19 November – 12 March 2023, extended until 10 April 2023).

SZYMBORSKA, IL MONDO DEI COLLAGE

On the occasion of the 100th anniversary of the birth of Nobel Prize Wisława Szymborska, the Museum of Palazzo Poggi hosted an exhibition of collages of the renown Polish poetess, alongside several side events. (27 September – 5 November 2023)

WHEN I GROW UP: NON SIAMO CLASSIFICABILI

A photographic project curated by Jon Bronxl, followed by an exhibition at the Zoology Collection, seeking to give a voice, a face and a body to the wish for transformation of younger generations, avoiding simplistic characterisations or generational stereotypes. (12 November 2023 – 7 January 2024)

BOLOGNA SARÀ TRANSITORIA, MA IO MI SENTO A CASA. STUDIARE, ABITARE, VIVERE ALL'OMBRA DELLE DUE TORRI

An exhibition project conceived by the students of the History of Religions: Objects and Heritages course unit, aiming to discuss certain fundamental aspects of the student experience in Bologna by putting them in relation with the permanent collection of the Museo Europeo degli Studenti – MEUS. (24 November 2023 – 14 January 2024)

ANTONIO MARIA VALSALVA E LE ORIGINI DELLA MEDICINA SPERIMENTALE BOLOGNESE

A small exhibition to celebrate Antonio Maria Valsalva on the 300th anniversary of his death. As finding the truth becomes his obsession, Valsalva's curiosity shows through in his meticulous analysis of reality, down to its most hidden details. (14 December 2023 – 11 February 2024)

EDUCATIONAL SERVICES (11 locations):

- Services for individual visitors;
- Services for families and children;
- Services for groups;
- Services for University students and Summer and Winter Schools;
- Services for schools;
- Services for summer centres.

Every month, the SMA offers a packed schedule of over 100 events for families and individual visitors. Guided tours and other activities for groups, University students, and Summer and Winter Schools are also available on request.

The SMA offers a variety of pathways for schools, designed to achieve the UN Sustainable Development Goals (SDGs) and promote the key competences for active citizenship. The catalogue of learning and training activities on offer included the following pathways in the 2022/23 school year:

- 11 pathways for nursery schools;
- 53 pathways for primary schools, 14 of which also available 'on air';
- 40 pathways for lower secondary schools, ten of which also available 'on air';

- 37 pathways for upper secondary schools, nine of which also available 'on air';
- Bespoke Paths for educational and career guidance and for the acquisition of transferable skills (PCTOs) that can be combined with 'on air' learning paths.

In 2023, the SMA Educational Services continued to offer digital learning opportunities, including 'on air' online learning pathways broadcasted live to engage classes that would rather use this mode. The online activities "Una Gita al Museo 2.0" and "Oggi imparo a..." were also available.

Throughout the year, the WunderBo and Aldrovandi Experience video games remained accessible and usable, and guided tours led by professional actors were offered in cooperation with the Bologna Civic Museums to further exploit these digital tools for getting to know the collections.

Communication

The SMA's digital communication is structured around various channels, including its website, newsletter, Facebook pages, Instagram profile and YouTube channel, all essential tools for fostering a growing dialogue with the public.

Table 26 - The SMA's digital communication

Social media and website	2021	2022	2023
Facebook followers	21,564	23,372	26,781
Instagram followers	1,718	2,605	3,846
YouTube channel subscribers	203	416	525
Newsletter subscribers	7,514	7,301	7,286
Website visits	123,211	157,272	191,051

Digital cataloguing

Since September 2023, the catalogue of the University of Bologna's museum collections is accessible online. The catalogue is managed by the SMA with a view to giving the public the chance to further explore the University's museum heritage and researchers the opportunity to conduct in-depth studies on the collections, even remotely.

The online catalogue contains over 4,000 museum item data sheets, drafted in accordance with the guidelines outlined by the Istituto Centrale per il Catalogo e la Documentazione (Central Institute for Cataloguing and Documentation) of the Italian Ministry of Culture. It is the result of both new cataloguing operations and previous cataloguing campaigns, which have been recovered, revised and updated.



24LIBRARIES



47SERVICE POINTS



380 COMPUTER WORKSTATIONS



4,870READING SPACES/
NUMBER OF SEATS

Libraries

The **University Library System (SBA)** is the set of libraries and other facilities that offer bibliographic and documentary services throughout the University of Bologna. **The SBA ensures that library assets are kept up to date** and supports teaching activities by acquiring monographs, e-books, paper and digital periodicals, databases and electronic resources covering all disciplines studied at the University of Bologna. It also supports the transfer of knowledge for the benefit of teachers and students, other libraries, scholars and society as a whole, promoting the development of users' information skills through dedicated courses, workshops and one-to-one advice.

To facilitate users, the SBA has consolidated a real-time library update service through the Affluences app, which allows users to monitor the occupancy rate of the study places available in each University library and offers information on opening hours and directions, as well as news.

In the course of 2023, the migration of all of the AMS Historica digital cultural heritage collections to a new, improved digital platform was completed. Digitised collections, which are available open access, include over 330,000 files and had almost 200,000 views. Such remarkable increase has been made possible by the publication of important collections of the University Library, including manuscripts in Arabic and those of Ulisse Aldrovandi in the context of the National Edition of his works, as well as printed volumes from the Ancient Fund of the Antonio Cicu Law Library.

Bologna University Library - BUB

In 2023, the celebrations of the 500th anniversary of the birth of Ulisse Aldrovandi (1522-2022) came to an end, but the **BUB** continued to collaborate with the Museo Galileo on the technical aspects of the National Edition of Ulisse Aldrovandi's works.

The restoration of the wall paintings of the staircase, co-financed by Carisbo, also continued. This inspired research of a historical and artistic nature and on the materials, as well as an explanatory exhibition, in preparation for the publication of a dedicated volume at the end of 2024.

Eight internal exhibitions were also held, totalling 240 opening days and 3,334 visitors. The papyrus collection exhibition, between September and October, marked the end of a multi-year project in cooperation with the DISCI (see focus box).

The Library participated in the organisation and setting up of three exhibitions in Italy, by lending, among others, MS BUB 1213 (the Fables of Walter of England) to the Scuderie del Quirinale for the exhibition "Favoloso Calvino".

In 2023, a volume of the major series "Biblioteca Universitaria di Bologna. Analisi e strumenti", edited by Fabio Massaccesi, was published by Silvana (Milan) with the title: *Nicolò Di Giacomo: un "Breviario" giovanile tra Bologna e Firenze. Storia, tipologia liturgica, funzione e decorazione del manoscritto 343 della Biblioteca Universitaria di Bologna*. A booklet of the minor series "Guide e sussidi" was also printed in the form of a critical catalogue on the papyrus collection exhibition.

The Auditorium hosted 14 Seminars and conferences and two Presentations and meetings. In 2023, the number of participants in guided tours reached 5,499 (4,232 from within the EU and 1,267, i.e. 23%, from outside the EU), the highest number ever.

Table 27 – Facilities, services, heritage and activity 2023

DOCUMENTARY HERITAGE IN THE CATALOGUE 19	5,413,519
of which: books	3,315,448
of which: issues of periodicals	1,141,277
of which: other documentary material	40,307
of which: material on non-paper physical media	40,327
Electronic resources	870,980
of which: e-books	799,000
of which: online periodicals	71,600
of which: databases	380
Subscriptions to printed periodicals	5,180
Total document circulation	228,658
loans and renewals	197,624
interlibrary loans	10,133
items sent/received	20,901

 $^{^{19}}$ As of 2022, only pieces in the SBN and ACNP catalogues are indicated.



PAPYRI BONONIENSES

The Bologna University Library (BUB), in cooperation with the Department of History and Cultures (DISCI), has continued its efforts to make the images of the papyri in its collections more accessible. The papyri include models of letters in Latin and Greek, 'answer books' based on Homer's verses, personal and business letters, marriage contracts, reports of abuse, fiscal and census receipts. The restoration process was accompanied by educational and in-depth study sessions, as well as an exhibition tour inside the library to present the papyri to the public.

All the activities were narrated in five videos available both in the exhibition and on YouTube. These include interviews and recordings of the workshops and seminars, offering a variety of perspectives from students, researchers and scholars on the rich and little-known group of papyri preserved in Bologna.

Moreover, the complete critical edition of the *Papyri bononienses* is currently being prepared, while a new photographic campaign of the collection will soon be published on AlmaDL.

HERITAGE ENHANCEMENT

Among the many initiatives aimed at enhancing the library heritage in 2023, the **cataloguing and enhancement of the Milva archive**, curated by the Library of the Arts, stand out. The fund was bequeathed to the Bologna University Library by Martina Corgnati, the daughter of famous singer and actress Ilva Maria Biolcati, also known as Milva (1939-2021). All materials were carefully inventoried, catalogued and restored in collaboration with Archivi ER – Sistema Informativo Partecipato degli Archivi Storici and the Cultural Heritage Department of Regione Emilia-Romagna.

Enhancement initiatives included the exhibition "In arte, Milva", inaugurated on 22 November 2023 and opened to the public from 23 November to 4 February 2024 at the Museo e Biblioteca Internazionale della Musica in Bologna, which attracted 6,900 visitors.

The catalogue and inventory, developed in collaboration with SBN Bologna and Archivi ER, are already accessible through the website of the Library of the Arts and will soon be available for public consultation. The collection in the Library of the Arts includes extensive documentation on Milva's work in music and theatre and on her recording and performing career, as well as investigating her influences, sources of inspiration and the human and professional relationships she developed throughout her life.

A video presenting the archive is available on YouTube.

Open science

In the course of 2023, the University of Bologna intensified its efforts to promote Open Science, in accordance with the National Plan of the Italian Ministry of University and Research, through a series of actions at internal, national and international level. Among these, the **principle of Open Access was included in the new University Statute**, which encourages the deposit of research results in institutional repositories.

In addition, important communication, training and strategic guidance actions were implemented. A Research data management policy and a Policy on digital cultural heritage were adopted to promote good practices in the management, storage and open sharing of research data and cultural heritage.

The University joined the Agreement on Reforming Research Assessment promoted by **CoARA**, chaired the Italian National Chapter together with the National Research Council and organised the conference "Scienza aperta e valutazione della ricerca" (Open science and research assessment) during the Open Access Week.

At the same time, the University confirmed its membership of the **European Open Science Cloud (EOSC)** and joined two international networks supporting open science – the OPERAS Italian Node and COAR, the international association of institutional repositories.

The open access support and advisory services offered by the University Library System were boosted by validating the metadata of over 14,500 new publications, making more than 30,000 research outputs available through the IRIS-IR institutional repository. Consultancy on open access to research publications and data was provided to University researchers in over 4,500 cases.

Through the University's **Discovery Tool**, a large selection of scientific and academic journals (more than 101,000) and scientific monographs (more than 143,000) were made available in free open access. The migration of the digitised cultural heritage, including research collections (over 330,000 files), to a new platform in line with international standards was completed. The institutional repository for research data and grey literature was also updated. At present, over 125,000 digital documents, including dissertations and PhD theses, are freely accessible online through the services of the University Digital Library.

The University supports the possibility for authors to publish **diamond open access** at no additional cost through the institutional publishing services of the Digital Library, covering scientific journals, series and monographs. These included 65 journals in 2023, and four new monographic series were launched during the year.

The University also supports the possibility for authors to publish **gold open access** at no additional cost.

Lastly, in order to improve the quality and impact of research, the University has strengthened its support to researchers via the **Data Steward@UNIBO project**, under which FAIR experts provide support on research data management and open science issues.

7.5 COMMUNICATION AND INFORMATION

Communication and information play a key role in engaging and liaising with stakeholders. Through dedicated channels and content, this system promotes a dialogue with students, teachers, staff and the community, fostering transparency and active participation in research, teaching, the third mission and all institutional activities.

UniboMagazine, Press Office and events

UniboMagazine is the University of Bologna's **online magazine**. Updated daily, it covers a variety of topics and publishes the schedule of events at the University, as well as expressing its point of view on issues and events in the university world. Furthermore, it promotes the University's visibility and disseminates its activities and results at a national and international level.

The Press Office liaises directly with the media.

Table 28 - UniboMagazine and the Press Office in figures in 2023

UniboMagazine	2023
Published articles and events	2,016
UniboMagazine accesses	633,128
UniboMagazine pageviews	969,394

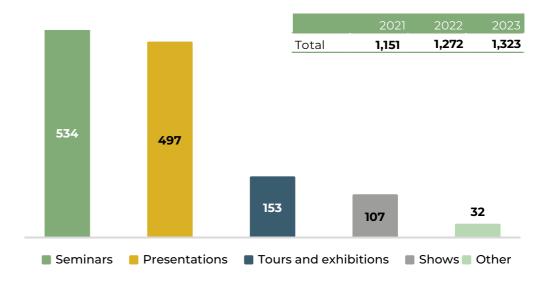
Issues in national media and foreign news sites	2023
Newspapers/Periodicals	17,936
Radio/TV services	2,792
Italian news sites	10,880
Foreign news sites	1,389
Total	32,997



The University of Bologna organises a significant number of events on a regular basis across the Multicampus, including presentations, shows, seminars, ceremonies, etc. These are also promoted and produced in partnership with other local organisations.

In 2023, 1,323 events, both in person and online, were posted on the UniboMagazine calendar, compared to 1,272 events in 2022.

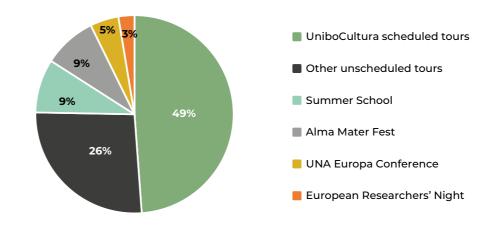
Figure 83 – Events in 2023



UniboCultura

UniboCultura is a programme of initiatives to promote the enhancement of the history of the University of Bologna, its historical figures and illustrious alumni, and its buildings and venues. In 2023, 56 guided tours were conducted, which were attended by 1,073 visitors. In addition, during the year, the staff training course titled "Storia della nostra Università" (History of our University) continued, with 89 participants (first edition). All UniboCultura initiatives are free and open to the public.

Figure 84 – Guided tour participants 2023



External institutional newsletters

The UniboCultura newsletter informs about events open to the public organised by the University. It has a mailing list of over 5,000 people, mostly outside the University. In the course of 2023, 19 newsletters were sent.

Institutional website system

The University website system consists of more than 1,460 websites and involves over 5,100 editorial staff. During 2023, the University website system had 66,788,637 visits.

Table 29 – Website system figures

Website	Number of sites	Visits	Pageviews
Main website (www. unibo.it)	-	21,849,879	46,866,463
Main website (www. unibo.it)	-	3,786,361	11,470,942
Degree programme websites	313		54,049,887
Department websites	31	1,771,034	3,735,790
On-demand websites (Sites, Professional master's programmes, Specialisation Schools, Centres, PhD programmes)	854	2,247,474	5,159,292
On-demand websites (Web events)	230	583,659	1,641,762
Websites of various Structures and Services (SBA, SMA, Calls for applications, etc.)	33	3,418,635	8,323,495

In 2023, a web strategy review of all of the University websites was launched. A new IT architecture and graphical update have been implemented, and many sections of the main website have been revised in terms of design and content. This is the first step of a review process that will involve all of the dimensions of the University websites, and will continue until 2025.

Social media channels

On a daily basis, the University of Bologna uses **social media to communicate**, inform and encourage participation, dialogue and exchange with various stakeholders, including teachers, professional staff, society, academic institutions, businesses and other organisations, as well as students and prospective students.

In 2023, the University reviewed its social media strategy to improve the positioning of each channel and increase communication effectiveness.

Table 30 – Institutional social media channels

CHANNEL	AIM	TARGET	TOTAL FOLLOWERS	INCREASE IN 2023
@UNIbo	The channel where the University meets the student community: information, initiatives and opportunities	Students throughout their university career	January-December 2023: 142,519	+11,519
UniboPER	The channel to tell society about the research, culture and commitment at Alma Mater	Students and citizens	December 2023: 4,388	+539
f Facebook	The institutional agenda of the University of Bologna	Researchers, professionals, alumni, citizens, institutional stakeholders	December 2023: 133,765	+13,324
in LinkedIn	The reference network for those who are part or want to continue to be part of the Unibo community	Researchers, professionals, alumni, citizens, institutional stakeholders, businesses	December 2023: 397,203	+62,574
X	The channel that gives space, voice and visibility to scientific research	Researchers, professionals, alumni, citizens, institutional stakeholders	December 2023: 31,091	+2,832
@UNIbo	A video archive for an immersion in the Unibo universe	All	December 2023: 32,600	+3,438
Spreaker	Authoritative voices from the University to navigate the transformations of our time	All	Download 2023: 36,000	
Telegram	The information bulletin for the student community available on your smartphone	Students throughout their university career	Enrolled in 2023: 20,416 Channel opened in February 2023	
TIKTOK	The channel where the University meets future students	High school and first year university students	Channel opened at the end of December 2023	



According to the latest edition of the uniRank ranking, the University of Bologna is the first university in Italy in terms of number of Instagram followers. <u>Top 200 Universities on Instagram | 2024 Instagram University Rankings (4icu.org).</u>

UNIBOPER

The **@Uniboper Instagram profile** is the official channel of the University of Bologna to communicate its commitment to society and disseminate its research and culture. It targets a general, lay audience, particularly users between 18 and 35 years of age, at whom public engagement communication is mainly aimed.

The channel opens up a window onto the University, disseminates the value it generates and establishes a dialogue with the world, enabling the audience to keep up to date with topical research, ongoing projects, results achieved and discoveries, as well as making the places and protagonists of research and the initiatives and events open to society known. Content is structured around four key themes: research, sustainability, culture and rights. In 2023, the visual identity of the profile was updated and it is now characterised by a new, contemporary and appealing design.

TELEGRAM

Unibo_Official is the information bulletin of the University accessible via smartphone. It provides students in first and second cycle degree programmes with the latest updates on the University and information on important deadlines via a weekly newsletter in Italian and English (Novità da Unibo / News from Unibo), structured around topics with thematic hashtags.

It further promotes events of general interest with dedicated editions (#InPrimoPiano / #Focus) and sends out urgent notifications (#Avvisi / #Alerts).

At the end of 2023, about one student in four was registered with the channel. 56% of those registered use Telegram in Italian, 39% in English, and the other 5% in other languages, such as Russian, French, Spanish, German and Turkish.

Public Relations Office

The Public Relations Office (URP) facilitates interactions with the University through various information channels: front office, call centre, email and direct messages via certain institutional social media (i.e. Instagram, TikTok and Telegram). It is the first contact point for those who wish to get in touch with the University of Bologna, especially prospective students.

It caters for all types of national and international users (about 28% of total requests), providing general information on teaching and administrative aspects, initial guidance on the University's services, competent offices for specific requests, and regulations. It is the reference point for reports, suggestions and complaints, as well as one of the recipients of requests to access University data and documents. During 2023, the URP handled over 13,000 contacts.

Figure 85 - URP contact methods

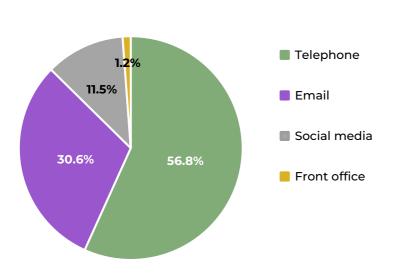
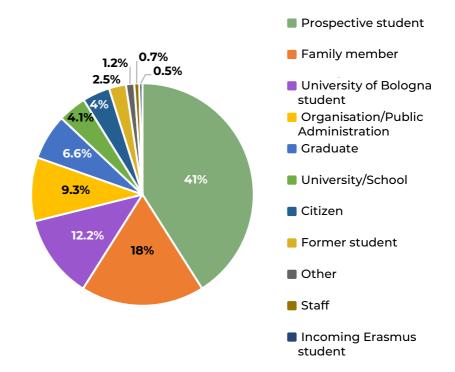


Figure 86 - URP users





20,000
CUSB MEMBERS
INCLUDING OVER 11,000
MEMBERS WITHIN
THE UNIVERSITY
COMMUNITY



1 million ACCESSES TO OUR FACILITIES



Over 13,000
PARTICIPANTS IN EVENTS
AND TOURNAMENTS



9
DIRECTLY OPERATED
SPORTS FACILITIES



Over 200
HIGH-LEVEL ATHLETES
IN THE DUAL CAREER
PATH



30 SPORTS FIELDS



EUROPEAN TITLES WON IN 2023



ITALIAN UNIVERSITY
TITLES WON IN 2023



AFFILIATED COMPETITIVE SPORTS SECTIONS



Over 100
DISCIPLINES



Over 150 SPORTS AND FITNESS CLASSES

7.6 SPORTS AND HEALTH

Health protection

Health is a state of physical, mental and social well-being. This principle lies at the heart of the University's initiatives pursuing the well-being of students, staff and the local community through innovative tools and approaches.

During the course of 2023, the project **Ci vuole una città** (It takes a city), launched in 2022, was developed together with the Local Health Authority, Comune and Metropolitan City of Bologna, with a view to creating a Recovery College in the city, understanding exercise as a positive experience that actively contributes to well-being. Exercise leads to well-being because it improves one's mood and ability to focus while helping to reduce and deal with stress, anxiety and insomnia. The University has responded to this challenge by broadening the number of recipients of the Recovery programme catalogue and organising well-being workshops for lower secondary schools of the Metropolitan City of Bologna, some of which centred on exercise as a way to promote mind and body balance on the occasion of World Mental Health Day.

Sports have been at the heart of many initiatives on the Romagna Campuses too. The University of Bologna took part in RiminiWellness 2023 by organising conferences and meetings focusing on sports and disability and on the interaction between sport and university.

During the Wellness Week – La settimana del movimento e dei sani stili di vita (Exercise and healthy lifestyle week), organised by Wellness Foundation and Regione Emilia-Romagna on the occasion of the International Day of University Sport, the Bologna University Sports Centre (CUSB) held a number of initiatives at the AlmaGyms on the Cesena, Forlì and Rimini Campuses.

Students can join the CUSB, a university sports association that promotes amateur and competitive sports in Bologna and its surroundings to foster psychological and physical well-being and disseminate the universal values embedded in sport.

Well-being promotion

The University finances the activities of the **Bologna University Sports Centre** – **CUS Bologna A.S.D.** (**CUSB**), an amateur sports association that is a member of the Italian University Sports Federation (FederCUSI), recognised by the Italian Olympic Committee (CONI). The CUSB was tasked by the Italian State with promoting and enhancing physical education and sports for Italian university students.

The CUSB operates all University-owned sports facilities and a number of municipal facilities in the Bologna area and elsewhere, offering sports services not only to students and staff, but also to the local community across all Multicampus sites.

The CUSB services range from sports promotion activities, through events held either directly or in partnership with other clubs, to competitive sports activities organised by the competitive sports sections affiliated with the relevant federations (Athletics, Tennis, Padel, Indoor Hockey, Master Swimming, Master Water Polo, Finswimming, Fencing and Sailing), to important university sporting events such as the National University Championships (CNU) and the European University Championships (EUSA).

In 2023, the University of Bologna's official teams achieved many successes in sports, winning the European championships in men's basketball, women's volleyball and judo, as well as medals at the National University Championships in Camerino in judo, taekwondo, tennis, table tennis and athletics.

In Bologna, the CUSB operates seven university multi-sports facilities and two municipal facilities. It also has many agreements in place with local organisations that enable the University community to play sports in a widespread manner. The two main university facilities are the Record University Sports Centre and the Terrapieno facility. The CUSB also manages other important University and municipal sports facilities elsewhere. Recently, the range of facilities has been expanded to include ALMA GYMS in Bologna, Forlì, Cesena and Rimini, offering fully equipped rooms with cutting-edge fitness machines and a variety of innovative fitness courses.

CUSB INITIATIVES FOR THE COMMUNITY

Alma Mater Fest – In 2023, for the fourth year in a row, the CUSB organised the Alma Mater Fest, the freshers welcome event of the University of Bologna. The six days of the event were filled with over 250 meetings attended by more than 13,000 participants and over 100 guests. The Alma Mater Fest offers a wide variety of initiatives in the areas of sports, inclusion, services and in-depth sessions, allowing the University of Bologna and its venues to showcase their many sides and most significant projects.

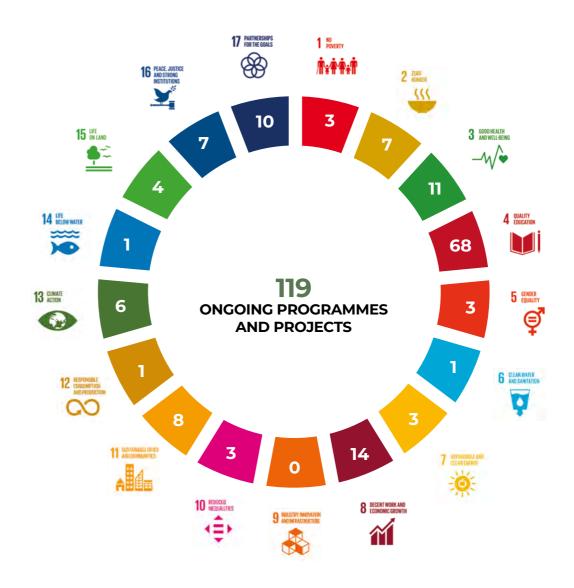
Discounted membership – Also in the 2023/24 academic year, the CUSB and the University renewed a promotion to encourage sports participation, socialisation and a healthy lifestyle: new students were offered free membership of the University Sports Centre and discounted rates applied to all students, employees and children of employees, to whom the annual CUSB membership was offered at €5 only (instead of €13 for non-University members).

Summer camps – "Superiamo le diversità" (Let's overcome diversity) was the title of the 2023 edition of the Unibo summer camps for the children of University of Bologna employees, with discounted rates and a sports, cultural and recreational programme focusing on education on inclusion and hospitality. Over 100 families of our employees attended during the weeks between 26 June and 14 July.

More than 130 hours of activities were run by the CUSB, including workshops, music lessons and various sports activities (swimming, fencing, tennis, frisbee, basketball, etc.), to create opportunities for gathering and sharing and to teach children and young people about overcoming gender stereotypes and discrimination.

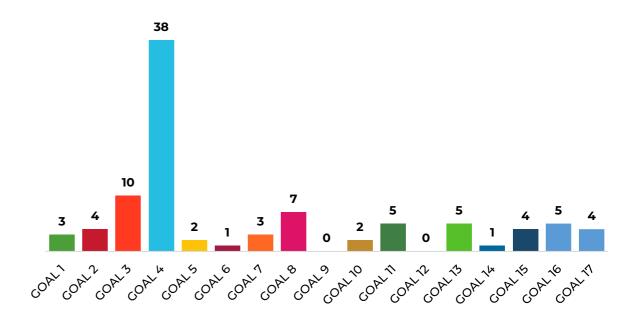
7.7 IMPACT ON THE UN SUSTAINABLE DEVELOPMENT GOALS (SDGS)

In 2023, the University acted as coordinator in 42 out of 119 ongoing **programmes and projects**. These are labelled based on the 17 Sustainable Development Goals (SDGs) of the UN 2030 Agenda and represented below. Each project may be related to more than one **SDG**.



In total, 37 **international cooperation and collaboration projects** in the third mission area were ongoing in 2023. Each of them may be related to more than one SDG, as represented below.

Figure 87 – International cooperation and collaboration projects (third mission)









8,443 m² PHOTOVOLTAIC SURFACE AREA



1,975
COURSE UNITS
DEALING WITH
ENVIRONMENTAL
ISSUES IN THE 2023/24
ACADEMIC YEAR



1,103,885 KWh ENERGY FROM RENEWABLE SOURCES



20,369
SUBSIDISED SEASON
TICKETS FOR
STUDENTS AND STAFF
TO ENCOURAGE
THE USE OF PUBLIC
TRANSPORT



€1,305,000 EXPENDITURE FOR SUBSIDISED SEASON TICKETS



8.1 ENERGY POLICIES AND CONSUMPTION

The 2022-2027 Strategic Plan has spurred the need for a University Energy Plan to reduce consumption and improve the energy efficiency of buildings. The inputs for organic energy policy planning have come from well-established national and international policies.

University Energy Plan

In the past five years, the European Union's REPowerEU has significantly revised the minimum targets to be achieved by 2030 in terms of share of energy from renewable sources, energy efficiency in end-uses and climate-altering gas emissions. On a local level, the Regione Emilia-Romagna's Labour and Climate Pact pursues similar goals, aiming to achieve decarbonisation before 2050 and 100% renewable energy by 2035. Bologna has been identified as one of the NetZeroCities aiming to reach climate neutrality by 2030. The Energy Plan accepts these challenges and frames them in the context of the University by identifying objectives, milestones and tools to achieve its goals.



<u>University Energy Plan</u>

NEW TOOLS FOR ENVIRONMENTAL SUSTAINABILITY

The **University Energy Plan** has been implemented. It outlines the strategies for promoting efficient energy use and for improving the social, economic and environmental sustainability of the University's activities.

Reporting on energy consumption and costs is now available on the University **Data Warehouse** embedded into the Archibus information system, thus making it possible to cross-check energy, real estate and other data that can affect the University's consumption.

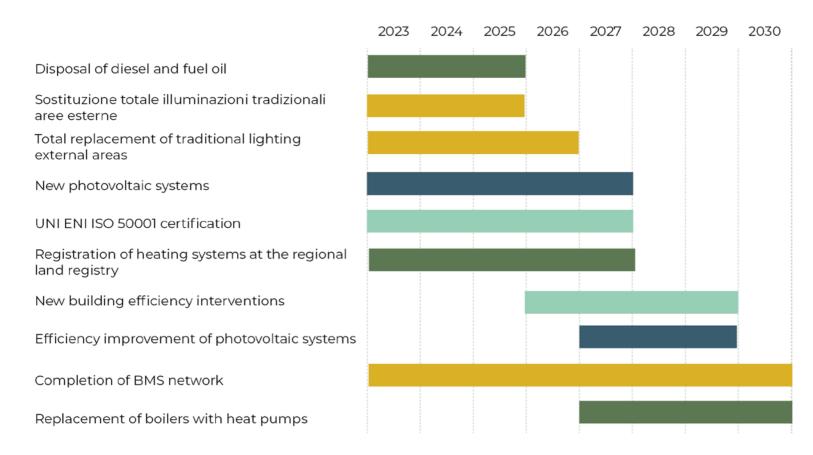
In accordance with the Italian national plan for the containment of energy consumption, and more generally to raise the University community's awareness of energy saving, a **10-point list of good practices** was circulated. A dedicated channel for reporting energy waste was created too (risparmio.energia@unibo.it).



Table 31 – Energy Plan goals to 2030

Goals	FIT for 55	University En- ergy Plan
Reduction of CO2 emissions by 2030 compared to 1990	55%	>70%
Renewable share of primary energy consumption	49%	24%
2020-2026 Annual increase in the renewable share of primary energy consumption for heating and air conditioning	+0.8%	+2.1%
2026-2030 Annual increase in the renewable share of primary energy consumption for heating and air conditioning	+1.1%	+7.0%
2020-2030 Reduction of end-use energy consumption	-11.7%	-16.4%
Reduction of average annual consumption	-1.9%	-2.3%
Renewed surface area per year	3.0%	3.8%

Energy Plan milestones



Roles and tools

The coordination and timing of energy initiatives are the responsibility of the **University Energy Board**, a steering committee set up in 2023. In addition, the University appointed an **Energy Manager** to supervise the Energy Plan and monitor its main indicators, oversee energy accounting and the tendering process for energy efficiency works and energy procurement, as well as checking facility maintenance and management.

In order to allow the Energy Board and the Energy Manager to perform their tasks, the University has equipped itself with a new control report embedded into the **University Data Warehouse**, which integrates the information about real estate and consumption from the Archibus software with all the other dimensions of analysis of the University's teaching, scientific and management activities.

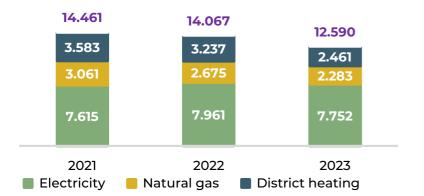
Energy consumption indicators (kWh/m²/year)	2022	2023
CEStot total primary energy per net surface area unit served ————————————————————————————————————	181	171
CESel electricity per net surface area unit served	48.5	45.2
CESth thermal energy per net surface area unit served	121.8	96.4
Energy strategy indicators	2022	2023
STLR (IS.13) - Gross internal floor area connected to the urban heating network (Strategic Plan Indicator)	375,933	375,933
CESg (IS.11) - Specific electricity consumption per net surface area unit served (Strategic Plan Indicator)	6.51	6.39
PFV (IS.14) - Peak power of photovoltaic systems operating in self-consumption (Strategic Plan Indicator)	1.51	1.51
%FV - Percentage of self-generated electricity in relation to the electricity consumed on an annual basis	2.92	2.66
%QRel - Percentage of electricity from renewable sources consumed on an annual basis	19.42	19.42
%QRth - Percentage of thermal energy from renewable sources consumed on an annual basis	2.88	2.28

Consumption

In 2023, consumption for both heating and air conditioning decreased, because winter was mild and because greater attention was paid in operating the systems, following the implementation of energy-saving policies and awareness-raising actions.

The cost of electricity grew by approximately 23% year-on-year.

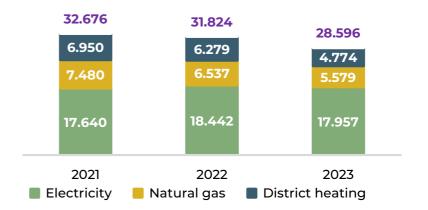
Figure 88 – Consumption time series (toe) ²⁰



The natural gas supply contract was executed in August 2022, when the energy market was very volatile and no longer offered 'fixed-price' purchase options. On average, the cost of natural gas grew by approximately 8%.

The district heating rate was heavily affected by the surge in the variable gas price, to which it is linked, in the first quarter of 2023, and then decreased during the year. As a whole, a 38% decrease on the previous year was recorded.

Figure 89 – Emission time series (tCO2)²¹

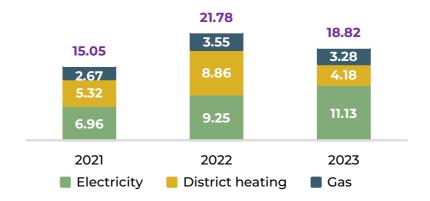


²⁰ The total figure includes other types of residual consumption: diesel oil with 80 in 2021, 68 in 2022 and 55 in 2023 and fuel oil with 123 in 2021, 126 in 2022 and 39 in 2023.

²¹ The total figure includes other types of residual emissions: diesel oil with 228 in 2021, 178 in 2022 and 117 in 2023 and fuel oil with 378 in 2021, 388 in 2022 and 168 in 2023.

An analysis of the consumption time series shows a clear improvement over the three-year period, with 2023 energy consumption down 13.6% compared to 2021. Such a significant drop in consumption had a concrete effect not only in terms of reduction of procurement-related costs (despite an increase in electricity and gas rates), but above all of CO2 emissions, which in 2023 decreased by 11.7% compared to 2021.





The emission index is stable: this is the ratio of total emissions to total consumption and measures the system capacity to lower CO2 emissions, given the same toe unit consumed. In the case of the University, the 2023 value is 2.27 tonnes of CO2 per toe unit consumed, against a national figure of 2.52. This means that the University's installations are **less polluting** than the national average.

Water

The University participates in HERA Spa's two-year Water Consumption Control Project, which envisages various monitoring actions aimed at reducing consumption. These include the georeferencing of supply points, digital alerts for potentially abnormal consumption and more frequent water meter readings at supply points where the risk of leaks is higher. 147 sensitive water supply points were identified, at which monthly meter readings were performed in 2023.

 $^{^{22}}$ The total figure includes other residual costs: heating oil with 0.10 in 2021, 0.11 in 2022 and 0.23 in 2023 (values in million euros).

A water-saving project was launched in 2023 with the installation of flow reducers on the taps of a pilot building. Water meter readings as of October 2023 indicate savings between 45% and 55% in the final months of the year.

The water service rate in 2023 increased by about 5% on the previous year due to an update implemented by the local integrated water service provider, resulting in an increase in costs despite a decrease in consumption.

Table 32 – Water cost and consumption

	Con	sumption (r	m3)		Cost (€)	
	2021	2022	2023	2021	2022	2023
Water	294,923	318,787	316,684	877,635	991,863	1,036,040

Photovoltaic systems

The energy from renewable sources generated by photovoltaic systems over a surface area of 8,443 m2 was 1,103,885.44 kWh (sources: ENEL metering service and GSE9 dedicated portal), i.e. 3% of total consumption. In 2023, the activities required to make the photovoltaic systems across all Campuses fully operational were launched.





3% ENERGY PRODUCED IN 2023



1,185.81 **kWp**TOTAL INSTALLED

CAPACITY

8.2 REAL ESTATE





Composition and use

The University of Bologna owns considerable real estate in both Bologna and Romagna. In terms of size, its buildings occupy 1,242,920 m2, including outdoor spaces (1,176,636 m2, excluding outdoor spaces), while its land totals more than 550 hectares. Geographical distribution and intended use are illustrated in the following charts.



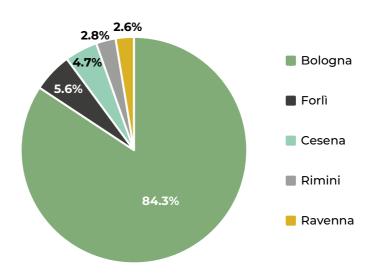
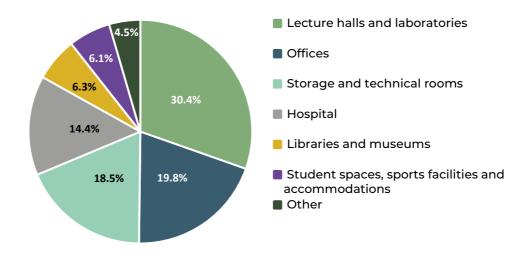


Figure 92 – Intended use of real estate



Development project

Over the past decade, the University has devised a real estate development plan targeted at containing energy consumption, increasing safety and improving functionality and accessibility of buildings and spaces, based on an investment plan of approximately €179 million and 48 interventions in the three-year period 2023-2025, including 32 interventions co-financed by the Italian Ministry of University and Research (Ministerial Decree 1274/2021) through various funding lines.

Table 33 – Projects submitted to the Italian Ministry of University and Research for participation in the Call for proposals for University Construction Projects

Lines of the Call for pro- posals	Projects submitted	Estimated costs	Co-funding requested from the Italian Ministry of University and Research (€)	Year of admis- sion to funding
А	11	58,997,000	35,398,200	2022
В	14	60,003,600	33,102,160	2023
С	3	11,525,000	6,915,000	2023
Е	4	26,445,000	15,827,332	Pending
Total	32	156,970,600	91,242,692	

Under another call for proposals of the Italian Ministry of University and Research (Ministerial Decree 455/2023), the University obtained funds of €7.1 million for sustainable construction projects and for bringing the University buildings in line with fire safety requirements.

Under the 2023-2027 Departments of Excellence call, 12 construction works were also planned, mainly aimed at upgrading systems and improving energy efficiency of the Department buildings. In 2023, the University of Bologna participated in the 2021/2027 ERDF − Regione Emilia-Romagna RP call with an energy efficiency project for the building that houses the Dental Clinic, obtaining co-financing of €500,000.

Enhancement of STEM Department laboratories

The University's real estate development plan for Bologna aims to relocate all STEM Departments that need laboratories that can no longer be housed in historical buildings. The Plan seeks to redevelop the buildings, remove all the equipment that has been installed over the years in order to bring the laboratories up to current standards, and better allocate available spaces to the General Administration divisions.

In 2023, in partnership with Ferrari and NXP, redevelopment works started at the E-Cells Lab, in the former Bodoniana complex. This cutting-edge electrochemical laboratory for research on lithium cells will allow PhD students, researchers and teachers to develop projects of high technical and scientific value, thanks to state-of-the-art equipment, scientific and technological knowledge sharing, and synergy between academic and industrial expertise.

Works also continued at the Biomedical Tower in the S. Orsola area, which will result in the creation of a cutting-edge biomedical research centre.



Enhancement of student well-being and teaching support spaces

The recovery of the former railway station just outside Porta S. Donato, known as Ex Veneta, has allowed enhancing spaces reserved for PhD students and research fellows working on NRRP projects on digital transition. The DISI and NRRP structures occupied the rooms in July 2023, while the lecture hall has been in use since September.

Redevelopment work is currently underway in the porticoes and Botanic Garden, the Palacus indoor sports arena at the Terrapieno facility in Bologna, and the former Criof building in Cadriano, which will house a canteen, offices and research laboratories of the Department of Agricultural and Food Sciences (DISTAL).

All engineering, architecture and computer science teaching and research activities on the **Cesena** Campus have been moved to the new building at Via dell'Università, 50. The same building now houses the Campus teaching services, IT services, library services and technical office. With the aim of improving spaces for sports and the well-being of students and staff, a gym was also built inside the facility. Moreover, in 2023, works started at the new Psychology building, which will bring all teaching and research activities of the Department under one roof near the other University buildings and vacate the premises currently in use, which are not owned by the University of Bologna.

Most of the **Ravenna** sites are located in the city centre, inside prestigious historical buildings a short distance from each other – a true 'city campus'. The new site housing lecture halls, offices and study rooms for the degree programme in Medicine at the Ravenna Hospital was inaugurated. On the other hand, works on Via S. Alberto, to be completed by 2024, will result in the creation of new teaching spaces and a library.

Most teaching activities in **Forli** have been relocated to the 'new Campus' in the heart of the city. Following completion of the school for interpreters and translators' teaching laboratories, the Campus is now fully functional. The first 25 beds of the hall of residence housed in the former ENAV building, where the School of Engineering is located, were delivered in October 2023, while renovation works of the Sauli-Saffi wings started in January 2021 and are ongoing.

The University continues to improve the quality of spaces and study rooms on the **Rimini** Campus. The renovation of the Student Administration Office lobby is almost complete, while the Rimini municipal authority is planning to expand the Technopole laboratories in the former slaughterhouse, with works to be completed by 2026.

8.3 ACTIONS FOR SUSTAINABILITY

The University of Bologna is committed to promoting, planning and implementing initiatives and projects to improve the interaction between buildings, people and the environment. The aim is to reduce the University's environmental impact, improve the quality of life in university spaces and encourage increasingly sustainable lifestyles. In order to improve its environmental impact by promoting a proper lifestyle, the University of Bologna has implemented a programme of actions to raise awareness and introduce good practices among the University community:

- Promotion of public transport;
- Adoption of a sustainable vehicle fleet;
- Limited use of disposable plastic items;
- Tree planting;
- Dematerialisation to reduce paper consumption;
- Routine and extraordinary maintenance;
- Building works to improve energy efficiency and environmental friendliness.

Microfiltered water dispensers

More than one hundred microfiltered water dispensers were installed throughout the Multicampus in 2023 in order to translate one of the main objectives of the Strategic Plan into reality – to reduce the environmental impact, improve the quality of life in university spaces and encourage increasingly responsible and environmentally friendly lifestyles. Reducing the use of plastic and related waste means adopting good practices that promote environmental sustainability.

Green spaces and the EXTRA Project

The University promotes and implements the development of green areas to improve the well-being of its community and expands them by planting new trees, always with a focus on biodiversity. In 2023, the outdoor areas of Villa Almerici in Cesena, where the Food Science section of the Campus is based, were set up with various furnishings (small tables, stools, benches) in the inner courtyard and park to create fully equipped spaces for study and recreation.



THE UNIVERSITY'S ARBOREAL HERITAGE

With regard to the maintenance of green spaces, the University of Bologna signed an agreement with the Metropolitan City of Bologna for the two-year period 2022-2023, to expand knowledge of the University's arboreal heritage while constantly monitoring its conditions through a software (R3GIS).

In 2023, 2,810 trees were surveyed and georeferenced in the University Cittadella and investigations were carried out around Bologna, using visual methods for trees identified as not at risk and instrumental methods for those classified as having some criticalities. During the two-year period 2022-2023, 40 structurally unsound trees had to be cut down, but just as many new ones were planted in surrounding areas. In addition, the most remarkable trees in around a half of the green areas on the Bologna Campus have been labelled with a QR code. By scanning the QR code, visitors can learn about the features of the plant species they are observing and about the garden they are visiting.

University of Bologna Experimental Farm (A.U.B.)

In collaboration with the University of Bologna Experimental Farm, the produce delivery service for the University community has continued. Products on offer include fruit and vegetables, processed agricultural products, wine and animal products. Two refugees employed at the Farm as part of the Unibo for Refugees project are also involved in production activities.

Guided tours for the University community continued in 2023, as an opportunity to share and learn about the University of Bologna's assets. The countryside hikes organised by the A.U.B. contributed to making the Farm's products known: these included chestnut picking, as part of the activities to enhance the centuries-old chestnut grove of Matildico, and a walk under the cherry blossoms at the Cadriano cherry orchard, where our new varieties of cherries are grown.

In 2023, the A.U.B. presented its 2022 Sustainability Report, illustrating the Experimental Farm's commitment to the University community it supports in research and teaching.

LaBo2030

With a view to narrating and promoting the UN Sustainable Development Goals, in 2023 the University of Bologna launched the LaBo2030 initiative for upper secondary schools of the Metropolitan City of Bologna. From September onwards, eight classes from four schools, totalling 161 students, took part in the initiative. Each class was supported by a researcher of the University of Bologna in developing a project over the course of several meetings both at school and at the University. The final event took place on Monday 27 November in the Salaborsa Library of Bologna, where students had the opportunity to present the results obtained and discuss the topics addressed.



SUSTAINABLE CONFERENCES

The international conference <u>Interesting Worlds to Come. Science & Technology Studies Facing More-than-Human Challenges</u>, organised by the Italian Society of Science and Technology Studies in collaboration with the Department of Philosophy and Communication Studies and the Department of Political and Social Sciences of the University of Bologna, took place in Bologna from 28 to 30 June 2023, with 425 participants.

In order to promote sustainability during the conference:

- We joined forces with the catering company to ensure that most of the ingredients used for meals served during lunches and coffee breaks were locally sourced and in season.
- All cups, plates and cutlery were recycled or compostable.
- Adequate recycling bins and water filling stations were provided. Water dispensers were available to fill personal water bottles, thus avoiding plastic bottles.
- Meals were packed in lunch boxes; participants were asked to select their lunch option for each of the two days of the
 conference at the time of registration and, in choosing from the menus provided, they were encouraged to prefer vegetarian or vegan options.
- Leftover food was donated to <u>Cucine Popolari</u>.
- The conference programme was only available in digital format; for ease of reference, a QR code was printed on the badges, which were made of paper and secured with a lanyard.
- A branded tote bag made of recycled cotton was given to each participant along with a paper-and-wood fan.

Waste policies and management

In order to be fully compliant with the applicable legislation, as well as to apply waste prevention and reduction and resource valorisation and optimisation models with a view to the circular economy and in line with Sustainable Development Goal 12, in 2023 the University set up the Resource and Waste Management Unit as part of the Occupational Health and Safety Service of the University Centre for the Protection and Promotion of Health and Safety.

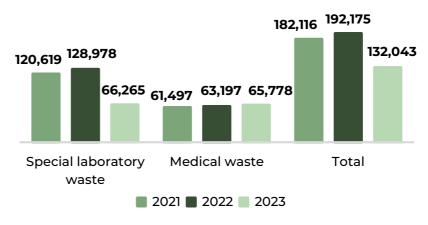
The unit is actively engaged in the activities of the Resources and Waste Working Group of the Italian University Network for Sustainable Development – \underline{RUS} .

Waste is sorted into plastic, paper, cans, glass, toner cartridges and batteries at the University of Bologna's facilities in and outside the city centre and on the Romagna Campuses. To raise awareness among the University community, in 2023 the University of Bologna participated again in the European Week for Waste Reduction, performing municipal waste collection and sampling activities.



Since 1998, special laboratory waste management is overseen by the Waste Technical Unit (Nu.Te.R.), which is organised into 47 local units to maximise its functionality.

Figure 93 – Special waste disposed of ²³(kg)



DISPOSAL OF MOVABLE PROPERTY WORKSHOP

The disposal of movable property constitutes an effective waste prevention action.

With this in mind, the University of Bologna has actively engaged in the work of the Disposal of Movable Property subgroup of the RUS Resources and Waste Working Group, which has analysed the obstacles to the transfer of movable assets by universities and sought strategies to extend their useful life. Specific Guidelines were drafted, which gather useful information for universities wishing to launch this process. In order to make this topic known, the University organised a workshop open to other Italian universities in February 2023.

²³ Information on special laboratory waste in 2023 is incomplete. As a consequence, so is the total figure.

Emissions and transport policies

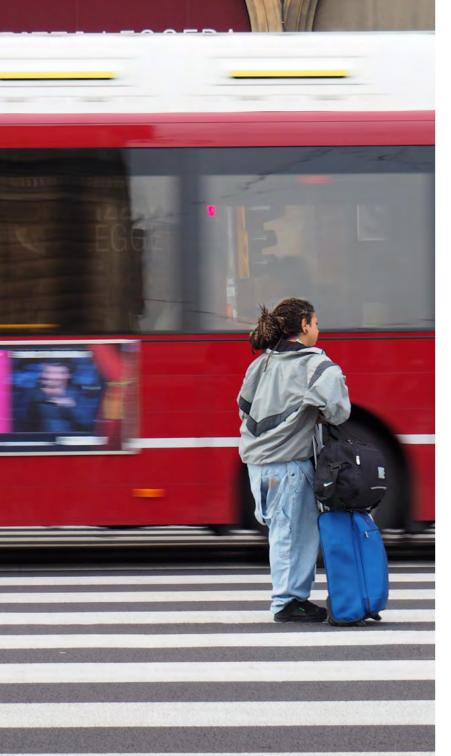
In order to monitor, survey and evaluate greenhouse gas emissions, the University has adopted a new Carbon Footprint calculation method according to ISO 14064.

Table 34 - Carbon Footprint

AREAS	t CO2eq	/year
AREAS	2022	2023
DIRECT EMISSIONS from heating	7,397	6,453
INDIRECT EMISSIONS from energy consumption	6,968	17,247
OTHER EMISSIONS (commuting, waste, etc.)	68,559	108,939
тот	82,924	132,639

Commuting has a very significant impact in terms of emissions. These increased in 2023 as in-person activities resumed almost entirely and the emergency measures implemented during the Covid-19 pandemic were revoked.

In order to act on this front, the University of Bologna continued to support various measures for sustainable mobility in 2023.



Subsidised public transport season tickets

The initiative aims to offer students and staff annual season tickets for public bus and train transport at discounted rates.

In 2023, the agreements in place with TPER and Trenitalia were renewed, also for the Romagna Campuses, extending subsidised season tickets to the entire Multicampus and to research fellows and students of first-level and second-level professional master's programmes, in addition to the existing recipient categories.

€1,305,000 -> 2023 expenditure for subsidised season tickets

Means of transport	Recipients	Total season tickets
	Students	17,006, of which 326 in Romagna Campuses
	Erasmus students	229, of which 60 in Romagna Campuses
	PhD students, other categories	781
	Teaching and professional staff	1,884
	Teaching and professional staff	469

Green vehicle fleet

The project encourages sustainable mobility through car sharing and electric and hybrid-powered vehicles. The vehicle fleet upgrading project reached the operational phase in 2023. At present, the vehicle fleet includes 48 full electric, hybrid and petrol-electric vehicles.

Networks for sustainability

In order to contribute to the pursuit of the Sustainable Development Goals (SDGs) of the UN 2030 Agenda through the dissemination of a culture of sustainability and of good practices, the University of Bologna has joined and actively participates in many networks, including:

- RUS Italian University Network for Sustainable Development
- ASViS Italian Alliance for Sustainable Development
- SDSN Sustainable Development Solutions Network

COURSE UNITS BY SDG





416





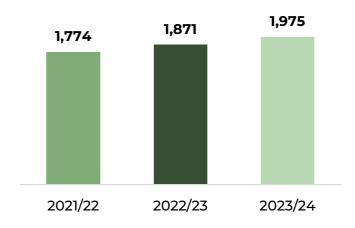


8.4 EDUCATION AND TRAINING ON ENVIRONMENTAL ISSUES

In the 2022/23 academic year, the number of course units on this subject grew.

The figures show the number of course units taught in Italian and English and their correspondence to SDGs 6, 7, 11, 12 and 13.

Figure 94 – Education and training on environmental issues





GRI 2 - GENERAL DISCLOSURES

GRI 2	1. The organisation and its reporting practices	Reference to 2024 SR index and/or notes
2-1	Organisational details	1.3 - Governance and organisation 6 - People
2-2	Entities included in the organisation's sustainability reporting	1.3 - Governance and organisation 2 - Sustainability governance
2-3	Reporting period, frequency and contact point	Reading guide
2-4	Restatements of information	Reading guide
2-5	External assurance	Feasibility analysis of future editions

GRI 2	2. Activities and workers	Reference to 2024 SR index and/or notes
2-6	Activities, value chain and other business relationships	3 - Economic value
2-7	Employees	6.1 - Teaching and Research Staff 6.2 - Professional Staff
2-8	Workers who are not employees	6.1 - Teaching and Research Staff 6.2 - Professional Staff

GRI 2	3. Governance	Reference to 2024 SR index and/or notes
2-9	Governance structure and composition	1.3 - Governance and organisation
2-10	Nomination and selection of the highest governance body	1.3 - Governance and organisation
2-11	Chair of the highest governance body	1.3 - Governance and organisation
2-12	Role of the highest governance body in overseeing the management of impacts	2 - Sustainability governance
2-13	Delegation of responsibility for managing impacts	2 - Sustainability governance
2-14	Role of the highest governance body in sustainability reporting	2 - Sustainability governance
2-15	Conflicts of interest	1.1 - Identity, principles and values
2-16	Communication of critical concerns	1.1 - Identity, principles and values 6.4 - Organisational well-being
2-17	Collective knowledge of the highest governance body	1.2 - Actions and results 2 - Sustainability governance
2-18	Evaluation of the performance of the highest governance body	1.2 - Actions and results 2 - Sustainability governance
2-19	Remuneration policies	6.1 - Teaching and Research Staff 6.2 - Professional Staff
2-20	Process to determine remuneration	6.1 - Teaching and Research Staff 6.2 - Professional Staff
2-21	Annual total compensation ratio	6.1 - Teaching and Research Staff 6.2 - Professional Staff

GRI 2	4. Strategy, policies and practices	Reference to 2024 SR index and/or notes
2-22	Statement on sustainable development strategy	1.2 - Actions and results 2 - Sustainability governance
2-23	Policy commitments	1.2 - Actions and results 2 - Sustainability governance
2-24	Embedding policy commitments	1.2 - Actions and results 2 - Sustainability governance
2-25	Processes to remediate negative impacts	1.1 - Identity, principles and values
2-26	Mechanisms for seeking advice and raising concerns	1.1 - Identity, principles and values
2-27	Compliance with laws and regulations	1.1 - Identity, principles and values
2-28	Membership associations	7.2 - International dimension

GRI 2	5. Stakeholder engagement	Reference to 2024 SR index and/or notes
2-29	Approach to stakeholder engagement	2.1 - Stakeholders and engagement
2-30	Collective bargaining agreements	6.1 - Teaching and Research Staff 6.2 - Professional Staff

GRI 3 - MATERIAL TOPICS

GRI 3	Material Topics	Reference to 2024 SR index and/or notes
3-1	Process to determine material topics	2.3 - Materiality
3-2	List of material topics	2.3 - Materiality
3-3	Management of material topics	2.3 - Materiality

GRI 200 - ECONOMIC ASPECTS

GRI 201	Economic performance	Reference to 2024 SR index and/or notes
201-1	Direct economic value generated and distributed	3 - Economic value
201-2	Financial implications and other risks and opportunities due to climate change	8 - Environment
201-3	Defined benefit plan obligations and other retirement plans	All University employees are enrolled in the public pension scheme; so-called contracted employees – professional staff and foreign language instructors – can enrol in the PerseoSirio supplementary pension fund. Both are managed by the Italian National Institute for Social Security (INPS – Gestione Dipendenti Pubblici).
201-4	Financial assistance received from government	3.1 - Economic value attracted

GRI 202	Market presence	Reference to 2024 SR index and/or notes
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	NA Remuneration is determined on the basis of contract categories as per the applicable collective bargaining agreements.
202-2	Proportion of senior management hired from the local community	NA The University's hiring regulations are defined by law on the basis of comparative assessment procedures and public calls for applications, and in compliance with the legislation on the right of persons with disabilities to work. 89% of the managers reside in Emilia-Romagna, specifically 75% in the province of Bologna, 6.25% in the province of Rimini, 6.25% in the province of Ravenna and 12.5% in the province of Forlì-Cesena.

GRI 203	Indirect economic impacts	Reference to 2024 SR index and/or notes
203-1	Infrastructure investments and services supported	7.4 - Cultural heritage (Museums, Libraries) 7.6 - Sports and health 8.1 - Energy policies and consumption 8.2 - Real estate
203-2	Significant indirect economic impacts	3 - Economic value4.4 - Student community services6.2 - Professional Staff (University welfare)8.3 - Actions for sustainability (Networks for sustainability)5 - Research

GRI 204	Procurement practices	Reference to 2024 SR index and/or notes
204-1	Proportion of spending on local suppliers	3.2 - Economic value distributed

GRI 205	Anti-corruption	Reference to 2024 SR index and/or notes
205-1	Operations assessed for risks related to corruption	1.1 - Identity, principles and values
205-2	Communication and training about anti-cor- ruption policies and procedures	1.1 - Identity, principles and values
205-3	Confirmed incidents of corruption and actions taken	1.1 - Identity, principles and values

GRI 206	Anti-competitive behaviour	Reference to 2024 SR index and/or notes
206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	NA

GRI 207	Тах	Reference to 2024 SR index and/or notes
207-1	Approach to tax	NA
207-2	Tax governance, control and risk management	NA
207-3	Stakeholder engagement and management of concerns related to tax	NA
207-4	Country-by-country reporting	NA

GRI 300 - ENVIRONMENTAL ASPECTS

GRI 301	Materials	Reference to 2024 SR index and/or notes
301-1	Materials used by weight or volume	8.1 - Energy policies and consumption
301-2	Recycled input materials used	8.3 - Actions for sustainability
301-3	Recycled input materials used	NA The University's activity does not entail significant use of packaging materials.

GRI 302	Energy	Reference to 2024 SR index and/or notes
302-1	Energy consumption within the organisation	8.1 - Energy policies and consumption
302-2	Energy consumption outside the organisation	8.1 - Energy policies and consumption
302-3	Energy intensity	8.1 - Energy policies and consumption
302-4	Reduction of energy consumption	8.1 - Energy policies and consumption
302-5	Reductions in energy requirements of products and services	8.1 - Energy policies and consumption

GRI 303	Water and effluents	Reference to 2024 SR index and/or notes
303-1	Interactions with water as a shared resource	8.1 - Energy policies and consumption (Water)
303-2	Management of water discharge-related impacts	8.1 - Energy policies and consumption (Water)
303-3	Water withdrawal	The University draws water from the public aqueduct.
303-4	Water discharge	8.1 - Energy policies and consumption (Water)
303-5	Water consumption	The University draws water from the public aqueduct. Quantitative data are reported on a building-by-building basis.

GRI 304	Biodiversity	Reference to 2024 SR index and/or notes
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	8.3 - Actions for sustainability
304-2	Significant impacts of activities, products and services on biodiversity	The University's activities are mainly carried out in built-up areas, where no significant impacts on biodiversity are generated. Agricultural scientific research, which involves carrying out land cultivation activities for agricultural purposes, has a negligible impact on biodiversity
304-3	Habitats protected or restored	8.3 - Actions for sustainability
304-4	IUCN Red List species and national conserva- tion list species with habitats in areas affected by operations	The University's activities are mainly carried out in built-up areas, where no significant impacts on biodiversity are generated. Agricultural scientific research, which involves carrying out land cultivation activities for agricultural purposes, has a negligible impact on biodiversity

GRI 305	Emissions	Reference to 2024 SR index and/or notes
305-1	Direct (Scope 1) GHG emissions	8.3 - Actions for sustainability (Emissions and transport policies)
305-2	Energy indirect (Scope 2) GHG emissions	8.3 - Actions for sustainability (Emissions and transport policies)
305-3	Other indirect (Scope 3) GHG emissions	8.3 - Actions for sustainability (Emissions and transport policies)
305-4	GHG emissions intensity	8.1 - Energy policies and consumption
305-5	Reduction of GHG emissions	8.1 - Energy policies and consumption 8.3 - Actions for sustainability (Emissions and transport policies)
305-6	Emissions of ozone-depleting substances (ODS)	8.1 - Energy policies and consumption 8.3 - Actions for sustainability (Emissions and transport policies)
305-7	Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions	8.1 - Energy policies and consumption 8.3 - Actions for sustainability (Emissions and transport policies)

GRI 306	a) Waste	Reference to 2024 SR index and/or notes
306-1	Waste generation and significant waste-related impacts	8.3 - Actions for sustainability (Waste policies and management)
306-2	Management of significant waste-related impacts	8.3 - Actions for sustainability (Waste policies and management)
306-3	Waste generated	8.3 - Actions for sustainability (Waste policies and management)
306-4	Waste diverted from disposal	8.3 - Actions for sustainability (Waste policies and management)
306-5	Waste directed to disposal	8.3 - Actions for sustainability (Waste policies and management)

GRI 306	b) Effluents and waste	Reference to 2024 SR index and/or notes
306-6	Significant spills	A spill control and clean-up procedure is in place for workplace spills, as per the chemical and biological risk management manuals. For accident reporting purposes, reference is made to the University procedure for the management of accidents and near misses, which also records reported and confirmed occurrences

GRI 308	Supplier environmental assessment	Reference to 2024 SR index and/or notes
308-1	New suppliers that were screened using envi- ronmental criteria	3.2 - Economic value distributed (Green procurement)
308-2	Negative environmental impacts in the supply chain and actions taken	3.2 - Economic value distributed (Green procurement)

GRI 400 - SOCIAL ASPECTS

GRI 401	Employment	Reference to 2024 SR index and/or notes
401-1	New employee hires and employee turnover	6.1 - Teaching and Research Staff 6.2 - Professional Staff
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.1 - Teaching and Research Staff 6.2 - Professional Staff 6.4 - Organisational well-being
401-3	Parental leave	6.1 - Teaching and Research Staff 6.2 - Professional Staff

GRI 402	Labour/management relations	Reference to 2024 SR index and/or notes
402-1	Minimum notice periods regarding operational changes	6.2 - Professional Staff (Internal and external mobility) Job security and freedom of teaching are constitutionally guaranteed for teaching staff; in 2023, the University updated its regulations governing internal mobility between and within Departments

GRI 403	Occupational health and safety	Reference to 2024 SR index and/or notes
403-1	Occupational health and safety manage- ment system	Legislative Decree 81/08 – The management system is set out and described in Chapter 1 of the Health and Safety Manual published on the University's intranet page
403-2	Hazard identification, risk assessment and incident investigation	The University draws up a General Policy Document at its annual meeting (Article 35, Legislative Decree 81/08). The competency requirements of personnel carrying out risk assessments are checked every year, pursuant to Legislative Decree 81/08. This is an internal audit based on training requirements. Each document is complete with an improvement programme and a schedule of assessments. Workers undertake the training courses required by Legislative Decree 81/08 and are aware of who is in charge of these roles at each facility. With regard to retaliation, they can turn to multiple figures (Ombudsman, Confidential Counsellor, etc.) and actions are taken in accordance with the Code of Ethics (Article 9). Article 33, paragraph 2 of Legislative Decree 81/08 – "The members of the prevention and protection service are bound to secrecy with regard to the work processes of which they become aware in the performance of their duties under this legislative decree. Incident management procedure (P11/SPP)"
403-3	Occupational health services	The service does not report the main types of occupational diseases. NA workplace hazards that pose occupational disease risks are not relevant to the service
403-4	Worker participation, consultation and communication on occupational health and safety	The Occupational Health Centre carries out worker health surveillance pursuant to Legislative Decrees 81/2008 and 101/2020. The Prevention and Protection Service is tasked with performing risk assessment, identifying the hazards at the University and promoting safety in all respects. The Occupational Health Centre collaborates with the Prevention and Protection Service for the purpose of protecting workers' health, as set out in Article 25, paragraph 1(a) of Legislative Decree 81/2008
403-5	Worker training on occupational health and safety	The report presented at the annual meeting (Article 35 of Legislative Decree 81/08) includes the Annual APOS Report (in conjunction with the meeting) and the Prevention and Protection Service (SPP) Training Plan

GRI 403	Occupational health and safety	Reference to 2024 SR index and/or notes
403-6	Promotion of worker health	6.2 - Professional Staff (Health insurance policy) 6.4 - Organisational well-being (Health and safety) 7.6 - Sports and health
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Application of Article 26 of Legislative Decree 81/08 with procedure P08/SPP.
403-8	Workers covered by an occupational health and safety management system	The way occupational health and safety is managed in the University is set out in P01/SPP and in the Regulations on occupational health and safety (Rector's Decree no. 87 of 7 February 2013, as amended), also referred to in Chapter 1 of the Health and Safety Manual.
403-9	Work-related injuries	6.4 - Organisational well-being (Health and safety)
403-10	Work-related ill health	The task of the Occupational Health Physician is not to identify and remove hazards, or minimise risks, except in the sense of protecting each worker by means of medical examinations and the expression of suitability judgments that may provide for prescriptive or restrictive measures. The Occupational Health Centre carries out worker health surveillance pursuant to Legislative Decrees 81/2008 and 101/2020. The Prevention and Protection Service is tasked with performing risk assessment, identifying the hazards at the University and promoting safety in all respects. The Occupational Health Centre collaborates with the Prevention and Protection Service for the purpose of protecting workers' health, as set out in Article 25, paragraph 1(a) of Legislative Decree 81/2008: "The Occupational Health Physician works alongside the Employer and the Prevention and Protection Service in the assessment of risks, also for the purpose of planning health surveillance, where necessary, in the preparation and implementation of measures for the protection of the psychological and physical integrity and health of workers, in workers' training and education on matters within his/her competence, and in the organisation of the first aid service, considering the specific type of work and exposure and the peculiar work organisation methods. He/she also contributes to the implementation and enhancement of voluntary 'health promotion' programmes in accordance with the principles of social responsibility."

GRI 404	Training and education	Reference to 2024 SR index and/or notes
404-1	Average hours of training per year per employee	6.2 - Professional Staff (Training)
404-2	Programmes for upgrading employee skills and transition assistance programmes	6.2 - Professional Staff
404-3	Percentage of employees receiving regular per- formance and career development reviews	6.2 - Professional Staff

GRI 405	Diversity and equal opportunity	Reference to 2024 SR index and/or notes
405-1	Diversity of governance bodies and employees	6.3 - Gender and citizenship (for more details please refer to the 2024 Gender Equality Report)
405-2	Ratio of basic salary and remuneration of women to men	For more details please refer to the 2024 Gender Equality Report

GRI 406	Non-discrimination	Reference to 2024 SR index and/or notes
406-1	Incidents of discrimination and corrective actions taken	6.4 - Organisational well-being (Inclusion and protection)
GRI 407	Freedom of association and collective bargaining	Reference to 2024 SR index and/or notes

GRI 407	Freedom of association and collective bargaining	Reference to 2024 SR index and/or notes
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Considering that the University's activities are mainly carried out in Italy, compliance with current legislation already protects workers' rights in terms of freedom of association and collective bargaining.

GRI 408	Child labour	Reference to 2024 SR index and/or notes
408-1	Operations and suppliers at significant risk for incidents of child labour	This is covered by compliance with national legislation on labour rights.

GRI 409	Forced or compulsory labour	Reference to 2024 SR index and/or notes
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	This is covered by compliance with national legislation on labour rights.

GRI 410	Security practices	Reference to 2024 SR index and/or notes
410-1	Security personnel trained in human rights policies or procedures	Given the type of activity carried out, the University does not come into direct contact with situations where human rights may be violated, as hiring practices and in general all operations take place in compliance with national laws that already protect these rights. The University, however, provides training on human rights to all possible stakeholders inside and outside the University of Bologna

GRI 411	Rights of indigenous peoples	Reference to 2024 SR index and/or notes
411-1	Incidents of violations involving rights of indigenous peoples	7.2 - International dimension (Cooperation projects, agreements and activities)3.2 - Economic value distributed (Procurement policy)

GRI 413	Local communities	Reference to 2024 SR index and/or notes
413-1	Operations with local community engagement, impact assessments and development programmes	7.1 - Technology transfer
413-2	Operations with significant actual and potential negative impacts on local communities	8.3 - Actions for sustainability (Emissions and transport policies - Waste policies and management)

GRI 414	Supplier social assessment	Reference to 2024 SR index and/or notes
414-1	New suppliers that were screened using social criteria	3.2 - Economic value distributed (Procurement policy)
414-2	Negative social impacts in the supply chain and actions taken	3.2 - Economic value distributed (Procurement policy)

GRI 415	Public policy	Reference to 2024 SR index and/or notes
415-1	Political contributions	NA

GRI 416	Customer health and safety	Reference to 2024 SR index and/or notes
416-1	Assessment of the health and safety impacts of product and service categories	3.2 - Economic value distributed (Procurement policy - Green procurement)
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	3.2 - Economic value distributed (Procurement policy - Green procurement)

GRI 417	Marketing and labelling	Reference to 2024 SR index and/or notes
417-1	Requirements for product and service information and labelling	The University's programme catalogue and services are published on the University website. The University complies with the provisions of the current national legislation on marketing and advertising. It complies with Legislative Decree no. 208 dated 8 November 2021 (Consolidated act on audiovisual media services), and reports any mass advertising costs incurred to the Italian Communications Regulatory Authority. In its communications and advertising messages, the University of Bologna observes the principles set out in its Code of Ethics, as regards the image that the University wishes to convey internally and externally. The Regulations governing the authorisation for temporary use of premises of Alma Mater Studiorum – Università di Bologna set out specific criteria for authorising third-party concessionaires to use University premises for advertising purposes
417-2	Incidents of non-compliance concerning product and service information and labelling	NA
417-3	Incidents of non-compliance concerning mar- keting communications	NA

GRI 418	Customer privacy	Reference to 2024 SR index and/or notes
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	The University aims to ensure that the personal data of its students, employees and any other subject who has a relationship with it is processed in a correct and transparent manner, pursuant to Regulation (EU) 2016/679





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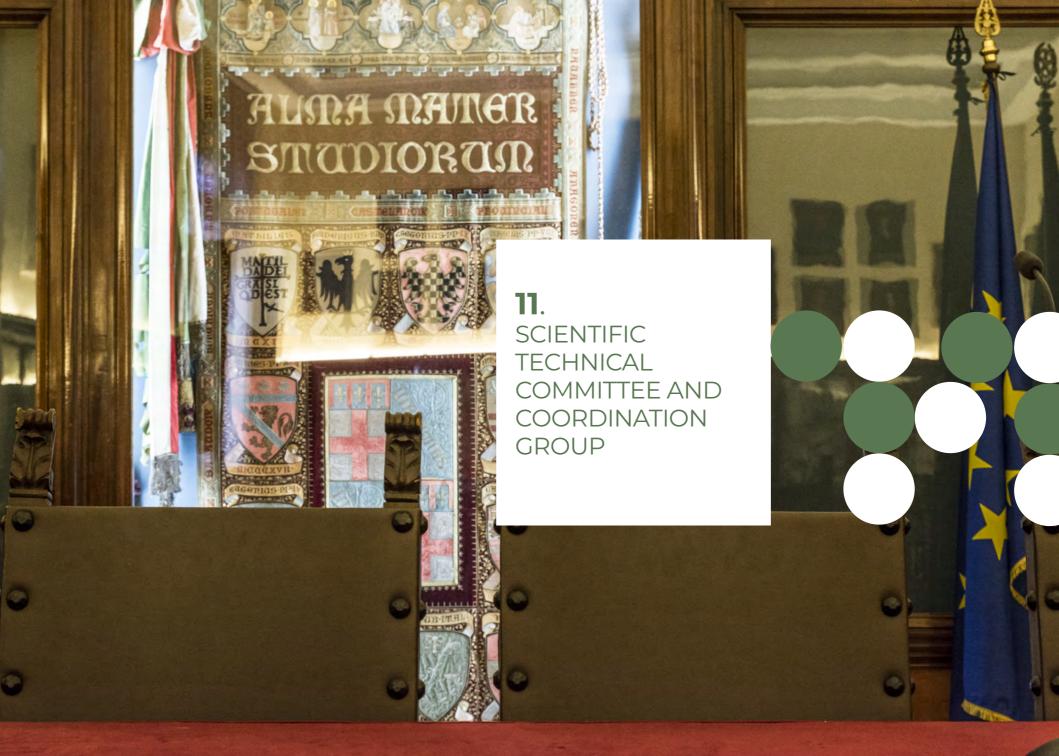
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The Sustainability Report was designed by the University of Bologna's **Scientific Technical Committee for Sustainability**, composed of: Rebecca Levy Orelli, Delegate for Budget and Planning, Federico Condello, Delegate for Institutional Communications and the Students, Giacomo Bergamini, Delegate for Sustainability, Maurizio Marano, Associate Professor, Federica Farneti, Associate Professor, and Camilla Valentini, Head of the University Planning and Data Analysis Unit.

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