

# UNIVERSITY OF L'AQUILA

## AND THE U.N. SUSTAINABLE DEVELOPMENT GOALS



REPORT 2020-2021

UNIVERSITY OF L'AQUILA  
SUPPORTS THE SUSTAINABLE  
DEVELOPMENT GOALS



UNIVERSITÀ  
DEGLI STUDI  
DELL'AQUILA

SUSTAINABLE  
DEVELOPMENT  
GOALS

## REMARKS

This document provides an overview of the actions towards SDGs performed by UnivAQ in the implementation of its missions.

Details on the results are contained in the specific pages of the website, to which links are provided.

This **Report on U.N. Sustainable Development Goals 2020-21** has been drafted by a dedicated Working Group, coordinated by

**Anna Tozzi**, Rector's Consultant for Internationalisation Policies

**Annamaria Nardecchia**, Head of Planning and Support Office for Supervisory Bodies

**Massimiliano D'Innocenzo**, staff of University Fundraising and Project Management Sector

with the participation of the

- Vice Rectors and Rector's Delegates who provided policy insight concerning the state of art of the Strategic Plan 2020-2025 implementation
- Heads of Administration Structures who provided data and documents concerning the achieved results addressing the SDGs targets, as well as the Regulatory Framework
- Other working groups, committees and referents such as
  - the Guarantee Act Committee (CUG),
  - the Gender Balance Committee,
  - the Commission for Disabilities,
  - the Energy Manager,
  - the Mobility Manager

who issued specific Plans and Reports that provide evidence for the data elaborated in this document.

### Regulatory framework

- University Statute
- Code of Ethics and Behaviour
- Code of Conduct for protecting the dignity of the person and preventing and combating sexual harassment
- Student Bill of Rights
- General University Regulations
- Student Services and Facilities
- Student Ombudsperson
- Linee Guida Per un uso della lingua italiana rispettoso dei generi / Guidelines For a gender-sensitive Italian Language

### Plans and Reports

- Strategic Plan 2020-2025
- Positive Actions Plans (PAP)
- Gender Equality Plan (GEP) 2021
- Welfare and Well-being Plan 2021
- Integrated Performance and Organisation Plans
- Erasmus Charter for Higher Education 2021/2027
- Erasmus Policy Statement 2021-2027
- Budget and financial Statements
- Social Responsibility Reports, integrated with the Performance Annual Reports
- Gender Equality Report 2021
- Greenhouse gas emissions inventory, updated 2020

*Editing:* Communication Unit

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# METHODOLOGICAL NOTE

This report was formulated by a dedicated Working Group that collected and analysed data and documents produced at University of L'Aquila from January 2020 to December 2021. Data concerning teaching activities refer to academic years 2019-20 and 2020-21.

## REPORT STRUCTURE

The *Rector's foreword* focused on the Institution's commitment to the sustainable development is followed by "*UnivAQ in numbers*" and "*SDGs @ UnivAQ*", graphic representations of the key figures and facts related to the University and its contribution to the SDGs.

The following 17 sections display the outputs and outcomes of the diversified activities carried out at UnivAQ on each U.N. 2030 SDG, assessed against specific indicators for the 4 dimensions: Teaching, Research, Third Mission and Institution.

## METHODOLOGICAL APPROACH

The data analysed and assessed come from

- the University Data Warehouse publicly available on the institutional website,
- content and aims of research projects and cooperation programmes as reported in the dedicated websites,
- SCOPUS queries through targeted sets of keywords,
- publications/reports/plans produced by committees, other working groups, delegates and referents (such as the Vice Rectors, the Guarantee Act Committee-CUG, the Gender Balance Committee, the Commission for Disabilities, the Equality and Equal Opportunities Referent, the Gender Medicine Referent, the Energy Manager, the Mobility Manager) that provide evidence for this document.

The methodology adopted to identify the contribution of the university's activities to the advancement of the United Nations 2030 Agenda, has been conceived in order to measure their direct and indirect impact on teaching and training, research and social innovation, public engagement and social responsibility, institutional structure and set-up, as specified below.

## Indicators and Metrics adopted for each SDG

### RESEARCH

#### **PUBLICATIONS: number of articles**

That number was taken from the Scopus database, considering all articles (2015-2021) with an author affiliated with University of L'Aquila containing the keywords identified by Scopus for each SDG, except for the 17 Goal: Partnership for the goals, generated by Elsevier.

#### **RESEARCH PROJECTS: number**

The number of FP7, H2020, HORIZON EUROPE, LIFE, INTERREG and NATIONAL RESEARCH PROJECTS active in 2020 and 2021 addressing, for each SDG, at least one of the targets (a set of keywords has been developed)

#### **RESEARCH CONTRACTS: number**

The number of research contracts subscribed by the university with national and international, private and public bodies.

### TEACHING

#### **COURSE UNITS: number for each SDG**

This data came from a survey investigating the link between the single course unit of a study programme and the U.N. Sustainable Development Goals. The survey followed a training addressed to academic and administrative staff on the principles underneath each goal and the local and global vision of them. More than 92% of course units of the two academic years 2019-20 and 2020-21 has a link with at least one SDG.

#### **COOPERATION AGREEMENTS, TEACHING AND MOBILITY PROJECTS: number**

The number of teaching and mobility cooperation projects active in 2020-2021.

### THIRD MISSION

#### **COOPERATION AND SOCIAL ENGAGEMENT RESEARCH PROJECTS: number for each SDG**

The number of projects active in 2020-2021.

#### **PATENTS AND SPIN OFFS: number**

The number of patents and spin offs active/initiated in 2020-2021

### INSTITUTION

#### **INFRASTRUCTURES: number**

The number of tangible and intangible infrastructures/assets for capacity building of academic community towards SDGs

#### **GOVERNANCE BODIES, COMMITTEES: scope and roles**

The governance resolution for their establishment

#### **REGULATIONS: aims and scope**

The motivation underneath their issuing, including the University Statute

#### **PARTNERSHIPS AND AGREEMENTS: number**

The number and the scope of the subscribed documents

# FOREWORD

## UnivAQ's commitment to sustainable development

*Institutional autonomy, academic freedom and integrity are the pillars on which the whole academic community of University of L'Aquila bases its own choices and actions.*

*The education of the new generations, the research of new knowledge, the respect for the fundamental ethical principles and a continuous enhancement of its multidisciplinary and international hallmark are the core activities that the university implements with a vision that goes beyond the present.*

*Well aware that these activities have a direct and indirect impact on the local and global society and that the success depends on the ability to influence the decision making levels, University of L'Aquila works together with the main social actors and cooperates with several universities around the world, sharing with them the fundamental values underneath research and teaching.*

*The complexity of the phenomena that characterize the present society and affect the people's life and future, is a huge challenge that requires a common approach based on scientific knowledge and innovative multidisciplinary methods. The increasing economic and cultural interdependencies, the growing North-South divide, the ageing and demographic change, the climate change impact, the social exclusion and poverty, the inequalities and migration flows, the increasing digital divide, the growing loss of confidence in democratic institutions at national and international level, require the development of innovative research and technologies and new and clever methods and processes of social innovation mechanisms. Indeed, the evolving demands of citizens combined with the global challenges and changes in the structure of knowledge production, require a better identification and a different assessment and understanding of the constitutive elements of innovation that overcome the present boundaries between the well-established categories and sectors, such as products, processes, goods or services. Higher education and scientific research are crucial and must take the responsibility to support both immediate and long-term policies and effective problem-solving strategies.*

*Universities play a key role in this process of re-invention of proper forms of solidarity and construction of an inclusive and innovative society also by reinforcing the cooperation with the third countries.*

*It is on these principles that University of L'Aquila has worked in the last years and has developed its Strategic Plan 2020-2025 where the U.N. 17 Sustainable Development Goals are interwoven throughout the four dimensions of the university activities: teaching, research, third mission and institution.*

### Edoardo Alesse

Rector

Università degli Studi dell'Aquila

The University of L'Aquila, through a renovated methodology for the data collection and valorization and integration of the documents, reports and performance assessments, had the opportunity to measure its capacity to cope with the global challenges and contribute to the achievement of the 17 SDGs.

The work done towards the SDGs have been assessed by **Times Higher Education Impact Ranking**, to which the university took part since the first edition and **UI GreenMetric World University Rankings**.

### THE Impact Rankings 2020-21

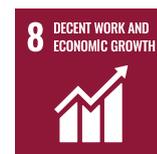
In the exercises 2021 and 2022 (referred to the years 2020 and 2021), University of L'Aquila has been ranked top 100 in 3 SDGS, and precisely

### 2021

17<sup>th</sup>



40<sup>th</sup>



77<sup>th</sup>



and in the range 101-200 for SDG 3, 5, 12

### 2022

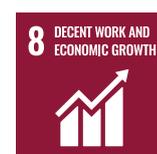
10<sup>th</sup>



89<sup>th</sup>



90<sup>th</sup>



and in the range 101-200 for SDG3, 9, 10, 12, 13

### UI GreenMetric WUR 2020-21

Measures the structural and behavioral changes promoted by the universities in 6 macro-areas of intervention:

**SI:** Settings & Infrastructures

**EC:** Energy & Climate Change

**WS:** Waste

**WR:** Water

**TR:** Transportation

**ED:** Education & Research.

University of L'Aquila ranked among about 1000 institutions

**2020: 40<sup>th</sup> globally**

**2021: 37<sup>th</sup> globally and 10<sup>th</sup> in ED**

# UnivAQ IN NUMBERS



**3**  
CAMPUSES  
ROIO, COPPITO  
CITY CENTER



**7**  
DEPARTMENTS



**3**  
RESEARCH CENTERS  
OF EXCELLENCE

**5**  
RESEARCH CENTERS



**3**  
LIBRARIES



**215**  
RESEARCH AND  
TEACHING  
LABORATORIES



**1**  
MUSEUM



**1**  
ARCHEOLOGICAL  
SITE



**31** FIRST CYCLE DEGREE  
PROGRAMMES

**34** SECOND CYCLE DEGREE  
PROGRAMMES  
(14 INTERNATIONAL)

**4** UNIQUE CYCLE DEGREE  
PROGRAMMES

**8** PhD  
SCHOOLS

**31** SPECIALISATION  
COURSES

**29** POST-GRADUATE  
VOCATIONAL,  
SPECIALISATION AND LLL  
COURSES



**2020: 18.641**

**2021: 18.822**

TOTAL NUMBER  
OF STUDENTS ENROLLED  
IN DEGREE PROGRAMMES  
OF ALL LEVELS,  
SPECIALISATION,  
POST-GRADUATE TRAINING  
AND LLL PROGRAMMES

**2020: 3,5%**

**2021: 4,6%**

INTERNATIONAL STUDENTS  
ENROLLED  
IN DEGREE PROGRAMMES  
OF ALL LEVELS

OF WHICH

**2020: 39%**

**2021: 48%**

FROM DEVELOPING  
COUNTRIES



**2020: 1.167**

**2021: 1.157**

TOTAL NUMBER  
OF EMPLOYEES

OF WHICH

**2020: 723**

**2021: 636**

ACADEMIC STAFF

# SDGs @ UnivAQ - KEY DATA

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## TEACHING

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**24 P**

**DEGREE PROGRAMMES (ANY LEVEL)**

GLOBALLY ADDRESSING ONE OR MORE SDGs

---

**3819 CU**

**COURSE UNITS**

ADDRESSING ONE OR MORE SDGs

---

**1** NO POVERTY



**173CU&3P**

**2** ZERO HUNGER



**142CU&1P**

**3** GOOD HEALTH AND WELL-BEING



**886CU&10P**

**4** QUALITY EDUCATION



**821CU&3P**

**5** GENDER EQUALITY



**148CU&3P**

**6** CLEAN WATER AND SANITATION



**91CU**

**7** AFFORDABLE AND CLEAN ENERGY



**154CU**

**8** DECENT WORK AND ECONOMIC GROWTH



**103CU&3P**

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**270CU&3P**

**10** REDUCED INEQUALITIES



**207CU&4P**

**11** SUSTAINABLE CITIES AND COMMUNITIES



**210CU&2P**

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**143CU**

**13** CLIMATE ACTION



**167CU&1P**

**14** LIFE BELOW WATER



**103CU**

**15** LIFE ON LAND



**132CU**

**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**172CU**

**17** PARTNERSHIPS FOR THE GOALS



**259CU&2P**

# SDGs @ UnivAQ - KEY DATA

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## RESEARCH

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**179P**

FP7, H2020, H-Europe, LIFE, INTERREG **RESEARCH PROJECTS**

ADDRESSING  
ONE OR MORE SDGs

---

**114C**

INTERNATIONAL AND NATIONAL

**RESEARCH CONTRACTS**

ADDRESSING  
ONE OR MORE SDGs

---

**1** NO  
POVERTY



**5P**

**2** ZERO  
HUNGER



**3P**

**3** GOOD HEALTH  
AND WELL-BEING



**17P&16C**

**4** QUALITY  
EDUCATION



**4P&6C**

**5** GENDER  
EQUALITY



**1P**

**6** CLEAN WATER  
AND SANITATION



**2P**

**7** AFFORDABLE AND  
CLEAN ENERGY



**12P&4C**

**8** DECENT WORK AND  
ECONOMIC GROWTH



**7P&4C**

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**46P&27C**

**10** REDUCED  
INEQUALITIES



**6P&1C**

**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**21P&22C**

**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



**7P&4C**

**13** CLIMATE  
ACTION



**10P&9C**

**14** LIFE  
BELOW WATER



**8P&5C**

**15** LIFE  
ON LAND



**8P&2C**

**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS



**14P&4C**

**17** PARTNERSHIPS  
FOR THE GOALS



**11P&9C**

# SDGs @ UnivAQ - KEY DATA

## THIRD MISSION AND SOCIAL ENGAGEMENT

**171CP**

**COOPERATION PROJECTS AND TEACHING COLLABORATION PROJECTS**

ADDRESSING  
ONE OR MORE SDGs

**1** NO  
POVERTY



**20CP**

**2** ZERO  
HUNGER



**3CP**

**3** GOOD HEALTH  
AND WELL-BEING



**2CP**

**4** QUALITY  
EDUCATION



**22CP**

**5** GENDER  
EQUALITY



**8CP**

**6** CLEAN WATER  
AND SANITATION



**3CP**

**7** AFFORDABLE AND  
CLEAN ENERGY



**6CP**

**8** DECENT WORK AND  
ECONOMIC GROWTH



**10CP**

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**12CP**

**10** REDUCED  
INEQUALITIES



**14CP**

**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**16CP**

**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



**7CP**

**13** CLIMATE  
ACTION



**7CP**

**14** LIFE  
BELOW WATER



**4CP**

**15** LIFE  
ON LAND



**5CP**

**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS



**20CP**

**17** PARTNERSHIPS  
FOR THE GOALS



**12CP**

# SDGs @ UnivAQ - KEY DATA

## INSTITUTION

12P  
PLANS

19R  
REGULATIONS

**1** NO  
POVERTY



1P&3R

**2** ZERO  
HUNGER



1R

**3** GOOD HEALTH  
AND WELL-BEING



3P&4R

**4** QUALITY  
EDUCATION



3P&11R

**5** GENDER  
EQUALITY



5P&14R

**6** CLEAN WATER  
AND SANITATION



1P&2R

**7** AFFORDABLE AND  
CLEAN ENERGY



5P&14R

**8** DECENT WORK AND  
ECONOMIC GROWTH



2P&15R

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



11P&28R

**10** REDUCED  
INEQUALITIES



5P&14R

**11** SUSTAINABLE CITIES  
AND COMMUNITIES



3P&11R

**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



3P&4R

**13** CLIMATE  
ACTION



5P&14R

**14** LIFE  
BELOW WATER



3P&4R

**15** LIFE  
ON LAND



3P&4R

**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS



11P&28R

**17** PARTNERSHIPS  
FOR THE GOALS



5P&14R

1 NO POVERTY



SDG1

## NO POVERTY

End poverty in all its forms and everywhere





## TEACHING

**173** Course Units  
**3** Post-graduate vocational, specialization and LLL courses

## RESEARCH

**76** Publications  
**5** Projects

## THIRD MISSION AND SOCIAL ENGAGEMENT

**20** Projects  
**1** Cooperation Agreement

## INSTITUTION

**1** Plan  
**3** Regulations

The contribution of UnivAQ to the achievement of SDG1 (in strict connection with SDG4, SDG6, SDG10) concerns the implementation of actions aiming to support students from low income families and from poor countries to access higher education and complete their studies. The aim is to provide them with knowledge and skills to become actors for the social and economic development once back home and find a proper job.

Targeted policies in terms of teaching, research and third mission and the compliant regulatory framework have been established. The latter includes financial aids and tuition fee reduction, scholarships, agreements with local Transportation Agency for cost reduction, part-time employment (150 hours) for several activities in the framework of Students Services.

## TEACHING

- **173** [Course Units](#)
- **3** Post-graduate vocational, specialization and LLL courses
  - o [Healthcare Management](#)
  - o [Management for Coordinating Nursing and Midwifery, Rehabilitative, Technical and Preventive Health Professions \(Qualifying\)](#)
  - o [Gender Medicine and Health: from Laboratory Research to Clinic and Healthcare Organisation](#)

## RESEARCH

- **76** Publications (Scopus 2017-2021)
- **5** [Projects](#)

## THIRD MISSION AND SOCIAL ENGAGEMENT

- [University Corridors for Refugees - UNICORE](#)
- **20** [Projects](#)

## INSTITUTION

- Plans and Regulations:
  - o [Welfare and Well-being Plan](#)
  - o [Economical Support to Low Income Students](#)
  - o [Tuition fee reduction](#)
  - o [Part-time jobs](#)
- Partnerships:
  - o [RUniPace](#)

2 ZERO HUNGER



SDG2

## ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



**2** ZERO HUNGER



### TEACHING

**142** Course Units  
**1** Post-graduate vocational, specialization and LLL courses

### RESEARCH

**303** Publications  
**3** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

**3** Projects

### INSTITUTION

**1** Plan  
**3** Regulations

UnivAQ contribution to the achievement of SDG2 concerns research, knowledge transmission on a sustainable rural development, food security and healthy nutrition. This includes training sessions and campaigns addressed to academic community and citizens focused on healthy lifestyle promotion and food waste reduction.

The university cannot track the distribution and consumption of food at the canteens since this service is provided by ADSU (Azienda per il Diritto agli Studi Universitari) managed by the Region Abruzzo but can educate people on the importance of food security and sustainable agriculture.

The university ensures all students access to affordable food. This means reduced cost of meals at the canteens for students with low income, agreements with food stores and supermarkets offering discounts and vouchers to students and university staff.

Research projects are also providing knowledge and skills to local farmers for the enhancement of the typical and niche high quality products, re-establishing in this way the ancient relationship between the city and the countryside.

The experiences are spread also to other regions in the world through several cooperation projects.

### TEACHING

- **142** Course Units
- **1** Post-graduate vocational, specialization and LLL courses
  - o Management for Coordinating Nursing and Midwifery, Rehabilitative, Technical and Preventive Health Professions (Qualifying)

### RESEARCH

- **303** Publications (Scopus 2017-2021)
- **3** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

- **3** Projects

### INSTITUTION

- Plans and Regulations:
  - o Welfare and Well-being Plan
  - o Economical Support to Low Income Students
  - o Part-time jobs

**3** GOOD HEALTH  
AND WELL-BEING



SDG3

## GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages





**TEACHING**

**886** Course Units  
**10** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**2.279** Publications  
**17** Projects  
**16** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**

**2** Projects

**INSTITUTION**

**3** Services  
**1** Regulation

UnivAQ contribution to SDG3 concerns research on emergent health issues, preparation of professionals in Medicine, Health Alliance and Public Health, and provision of services to the local and academic community. Activities contribute to SDG3, in connection with SDG8, SDG10 and globally with SDG1 and SDG2.

**LOCAL COOPERATION**

University of L'Aquila has a School of Medicine offering, besides the two unique cycle six-years programmes of "Medicine and Surgery" and "Dentistry" a variety of Health Alliance Programmes at Bachelor and Master level in two Departments:

- Department of Biotechnological and Applied Clinical Sciences (DISCAB)
- Department of Life Health and Environmental Sciences (MESVA)

The Servizio Sanitario Nazionale – SSN provides all citizens with high level health & wellbeing services through the territorial departments called ASL (Aziende Sanitarie Locali), managed by the Regions. These include hospitals and other medical health and care facilities providing diagnosis, specialized treatment for inpatient stays, rehabilitation, as well as preventive, promotional and educational activities. The school of Medicine is integrated with 2 regional ASLs (the main hospitals are "San Salvatore" of L'Aquila and "Giuseppe Mazzini" of Teramo) through a convention that regulates the clinical activities of university medical staff (professors, researchers, technicians, nurses, ...) in all the specialties, within their structures and where graduate and post-graduate students of specialization schools are properly trained in the profession. For these activities specific agreements are subscribed also with other institutions and structures.

**OUTREACH ACTIVITIES**

During 2020 and 2021, the worst period of pandemic, post-graduate students of several medical specialisations and health alliances greatly contributed to cope with emergencies and to track the outbreaks in the academic community, together with the occupational physicians.

The University is strongly committed to provide the local community with an informed awareness of the increasing risks for the health & wellbeing, and with

the correct knowledge of the scientific advancements concerning the common and rare pathologies. Outreach programmes/courses/events and projects developed and implemented in and with the local community, addressed to both scientists and general public, are offered every year and campaigns for prevention of cancer, strokes and other illnesses, promotion of correct lifestyle including nutrition and other hygiene relevant methods, family planning and sexual and reproductive health are continuously organized. Services to the community, provided by staff and students also at volunteer's level, include support to families (autism, bullying, dementia, addiction, ...).

**INSTITUTION**

- SACS - Listening and Counselling Service  
 National and International surveys and reports highlight as the present diverse student population reveals a complex set of mental health problems and distress. UnivAQ is witnessing this phenomenon and the increasing support needs of international students, especially those from underdeveloped countries with immigrant/refugee-like status. This service, founded in 1991, is offering UnivAQ students support and help in overcoming difficulties due to setbacks in their studies or psychological problems. Nowadays this service has proved to be fundamental. University academic staff contributes also in managing the U.O.S.D. Assistenza Consultoriale Area (a service addressing psychological distress, including prevention and care of psychological illnesses) organized and managed by the ASL within which UnivAQ Medicine school is integrated.

- Dr. SeCS - Sexological Counselling  
 "Doctor SeCS" is the university center that offers sexological counselling services for all students enrolled in the university. A team of sexologists, psychologists and psychotherapists are available to help students deal with problems related to sex, affective-relational issues and sexual identity. Dr. SeCS also aims at preventing sexual risk behavior by offering a service which is more specifically based on sexual education and guidance.

- DMTA - Molecular Diagnostics and Advanced Therapy Research Centre  
 The Centre, besides complex and competitive multi-disciplinary and integrated biological, translational and



### TEACHING

**886** Course Units  
**10** Post-graduate vocational, specialization and LLL courses

### RESEARCH

**2.279** Publications  
**17** Projects  
**16** Research Contracts

### THIRD MISSION AND SOCIAL ENGAGEMENT

**2** Projects

### INSTITUTION

**3** Services  
**1** Regulation

clinical research projects, provides requested services and consultation to external private and public bodies applying research outputs to real situations, in particular in clinical areas with the aim of providing precise and personalised diagnosis, therapy and prevention.

#### - "Centi Colella" sports centre

The University sports centre is managed by the CUS (Centro Universitario Sportivo) L'Aquila. The centre is equipped with many sporting facilities in two main locations: Centi Colella, Coppito Campus. On these structures several courses of the Sport Science degrees are implemented, but students of any programme can use them for leisure and physical activities.

#### - Smoke-free policy

In compliance with national laws University of L'Aquila issued very strict regulations for the surveillance. The rules are included in a detailed Plan addressing the risks prevention and management and ensuring the Workplace Safety and Security for the whole community.

### TEACHING

- **886** Course Units
- **10** Post-graduate vocational, specialization and LLL courses

- Neuro-Ophthalmology and Visual Neuro-Rehabilitation
- Obstetrics and Urogynecological Rehabilitation
- Abilitante alle funzioni di medico competente
- Sports Cardiology
- Molecular Diagnostics of Genetic, Tumorous and Infective Diseases
- Infermieristica clinica nelle unità di cure intensive e nell'emergenza
- Molecular Diagnostics of Genetic, Tumorous and Infective Diseases
- Riabilitazione in Chirurgia Coloretale e Proctologica
- Surgical Nursing for Operating Theatre Circulating Nurses and Robotic Technology Experts "Alessio Agnifili"
- Skeletal Muscle Interventional Radiology
- Healthcare Management

### RESEARCH

- **2.279** Publications (Scopus 2017-2021)
- **17** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

- **2** Projects

4 QUALITY EDUCATION



SDG4

## QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all





## TEACHING

1 Degree Programme  
**821** Course Units  
 3 undergraduate, Post-graduate specialization and LLL courses  
 4 projects

## RESEARCH

14 Publications  
 4 Projects  
 6 research contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

22 Projects  
 4 targeted actions

## INSTITUTION

2 Structures  
 4 Services  
 4 Plans

UnivAQ is strongly committed to provide high quality education as key tool for reducing inequalities, through the preparation of good teachers, the delivery of LLL to all and the provision of methods and tools in support of disability of any kind.

Activities addressing SDG4 targets are conceived and analysed for their direct impact on SDG8, SDG10 and indirectly on SDG1.

In its role of "Civic University" University of L'Aquila plays a crucial educational role not only for its students, but also for the wider community at local and global level. Strategic plans are established to guarantee LLL opportunities for all, to support and cooperate with primary and secondary schools, to enhance the participation and success of first-generation students and to ensure an inclusive environment.

The project **QUALITI** is a Strategic Partnership project led by the University of L'Aquila focused on the quality of university teaching. Higher Education Institutions have been traditionally focusing more on the quality of research results, while paying less attention to the quality of their teaching, with the widespread perception that teaching represents a relatively neglected activity. The available literature on this topic sheds light on the need for greater transparency of teaching quality and a demand for clear data obtained through assessment indicators focused on teaching, in order allow for performance comparisons among Higher Education Institutions. Hence, the main aim of the project is to enhance the quality of university teaching through systemic and integrated institutional action.

The project **TEACH4EDU** has the objective to respond to the need of Industry 4.0 and support the corresponding transition of HEIs - in the field of Computer Science and related disciplines - towards Education 4.0 where humans and technologies are aligned with the aim to enable achievement of skills, competences and knowledge necessary in 21st century.

New forms of teaching, learning and assessment in CS in Edu 4.0 and related teachers' skills and competences, Learning Design models, Collaborative Teaching Methods for Joint Creative Classrooms, learning data to create evidence-based learning design decisions, are the main Outputs supporting the needed transformation.

The project **HINGE**: Starting from the survey "Short Cycle Higher Education in Europe. Level 5: the Missing Link", this KA2 Strategic Partnership project coordinated by UnivAQ, intends to develop methodologies and tools for internationalizing short cycle tertiary qualifications (2 years) and apply the methodology to a pilot SCHE focused on ICT, area where the partner countries present skills shortage and growth potential.

The provision of international curricula at Level 5 proved to be one successful way to remove the obstacles in connecting the three worlds: universities, VET and labor market, that are often related to the lack of a common language (on knowledge, skills and competences) and of a clear strategy on how to use information on skills supply and needs.

The **RecoASIA** project aims at favouring and increasing the quality of vertical and horizontal mobility within the Asian and European higher education systems by increasing the recognition of qualifications within the Asian and European Region. The experience of cooperation gained within the Bologna Process, the expertise of the participating Higher Education Institutions and the practices adopted by the ENIC-NARIC networks, built a solid foundation to strengthen and increase collaboration between European and Asian regions. The strategy adopted by the RecoASIA project, fostered each participant's experience with regard to recognition, thus facilitating the mobility of international students and professionals, even those with a refugee's status.

## INDICATORS for assessing QUALITY EDUCATION

- Degree programmes (all levels)	137
- Degree programmes taught in English	14
- Specialisation, professional post-graduate/lifelong learning programmes	60
- Students satisfied of the attended courses	91%
- Graduates within regular enrollment	69%
- International students (UE and Extra-UE)	
o A.Y. 2019-2020	3,5%
o A.Y. 2020-2021	4,8%
- Proportion of first-generation students starting a degree on total number of students starting a degree	
o A.Y. 2019-2020	73,9%
o A.Y. 2020-2021	72,9%



## TEACHING

- 1 Degree Programme
- 821 Course Units
- 3 undergraduate, Post-graduate specialization and LLL courses
- 4 projects

## RESEARCH

- 14 Publications
- 4 Projects
- 6 research contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

- 22 Projects
- 4 targeted actions

## INSTITUTION

- 2 Structures
- 4 Services
- 4 Plans

- Students accessing services for disabled
  - o A.Y. 2019-2020 581
  - o A.Y. 2020-2021 425

## METHODS and TOOLS for ENHANCING QUALITY EDUCATION

- Teachers' training
- eTWINNING

**Teachers' Training** - The Vice Rector for Teaching organizes every year Training Meetings that offer an opportunity to explore issues relating to the innovation of university teaching, a place for comparison and exchange of good practices between the various teachers, the possibility to improve teaching effectiveness.

The cycles of seminars embrace different topics that touch on inclusion, the Goals of the 2030 Agenda, entrepreneurship and the third mission.

## Initial Teachers Education (ITE): eTwinning in the training of future teachers

The **Primary Teacher Education** degree course offers its students the opportunity to participate in eTwinning Training in the form of an indirect internship, managed by tutors. Due to its flexibility, sustainability and openness to innovation and national and international comparison, eTwinning is particularly suitable for the training of future teachers, who will increasingly be called upon to use ICT in their daily teaching, to support communication and learning in a foreign language, to work on projects involving students actively and developing personalized learning paths that favor the development of key skills.

## OUTREACH ACTIVITIES

University of L'Aquila undertakes educational outreach activities, as tailored lectures or demonstrations in campus and beyond, as in local schools and in the community.

They are:

- **Short Advanced Education Courses**, offering specialized knowledge in the field of cutting-edge, complex and multidisciplinary subjects, to graduates and people with professional experience. These courses may grant academic credits (ECTS)

- **Thematic Seminars**, intended for specialized and general public, focused on a specific topic that is explored with a different degree of detailed knowledge.
- I "Mercoledì della Cultura": meetings of university researchers with citizens in city pubs and other premises where several crucial topics are presented and discussed. These events named "Mercoledì della Cultura" started in 2016 and are yearly scheduled (on Wednesday).
- Street Science: Research at the Center. It is a demonstration and explanation of research activities performed by the University. This event started in 2015 and is yearly organized in the framework of "Researchers' night", celebrated in all university cities the last Friday of September. School students, citizens, tourists, are actively involved in the demonstrative experiments in the stands installed in the City streets.

## TEACHING

- **821 Course Units**
- **1** Unique Cycle Degree Programme in Primary Teacher Education
- **2** Post-graduate vocational, specialization and LLL courses
  - o Integrative 24 credits on anthropo-psychopedagogical disciplines and in teaching methodologies and technologies - Percorsi formativi 24 CFU
  - o Specialization Course on didactic support for pupils with disabilities - Corsi di specializzazione per il sostegno didattico agli alunni con disabilità
- **4** project for the quality enhancement of teaching methods:
  - o How to win the challenge: internationalizing EQF level 5 - HINGE
  - o Didactic QUALity Assessment for Innovation of Teaching and Learning Improvement - QUALITI
  - o Accelerating the transition towards Edu 4.0 in HEIs - TEACH4EDU
  - o Regional Cooperation in the field of recognition among Asian countries - RecoASIA

## RESEARCH

- **14** Publications (Scopus 2017-2021)
- **4** Projects



### TEACHING

**1** Degree Programme  
**821** Course Units  
**3** undergraduate, Post-graduate specialization and LLL courses  
**4** projects

### RESEARCH

**14** Publications  
**4** Projects  
**6** research contracts

### THIRD MISSION AND SOCIAL ENGAGEMENT

**22** Projects  
**4** targeted actions

### INSTITUTION

**2** Structures  
**4** Services  
**4** Plans

## THIRD MISSION AND SOCIAL ENGAGEMENT

- **22** Projects

## INSTITUTION

Structures, Plans, Services and Regulations:

- Department of Excellence
- Student Services
- Services for Disabled Students
- University Library System
- Online Libraries Services
- Continuous Education Quality Assessment
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Welfare and Well-being Plan
- "alias" career



## GENDER EQUALITY

Achieve gender equality and empower all women and girls



**TEACHING**

**148** Course Units  
**3** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**7** Publications  
**1** Project

**THIRD MISSION AND SOCIAL ENGAGEMENT**

**8** Projects

**INSTITUTION**

**1** Infrastructure  
**1** Service  
**5** Plans  
**7** Regulations  
**3** Reports

Ensuring that women are provided with equal access to education and enjoy of the same opportunities in the job market as men as well as the same treatment in career progression is a fundamental social pillar. UnivAQ contributes through campaigns against any kind of discriminations, short courses addressed to girls for promoting STEM studies, projects for curricula design in relevant fields containing gender issues. Special activities address the academic community aiming to enhance the gender equality, including economic support to students and staff with children. UnivAQ collects and tracks by gender student-related and staff-related data according to several indicators.

**MAIN INDICATORS**

- Number of students starting a degree	
◦ A.Y. 2019-2020	3.178
◦ A.Y. 2020-2021	3.534
- Number of female students starting a degree	
◦ A.Y. 2019-2020	1.677
◦ A.Y. 2020-2021	1.775
- Number of senior academic staff	
◦ A.Y. 2019-2020	575
◦ A.Y. 2020-2021	387
- Number of female senior academic staff	
◦ A.Y. 2019-2020	208
◦ A.Y. 2020-2021	222

Engineering and Computer Science are still the fields where the gender gap in the student population is evident. Targeted corrective actions like [PINKAMP](#) or "[My future as Engineer](#)" are organized every year to achieve a balanced female/male student rate in fields that suffer from relative low female presence.

**OUTREACH ACTIVITIES**

UnivAQ policy focuses on the importance to transmit the gender culture in the academic community and in the society. To achieve this, targeted information events have been organised by using the "right" language. The staff followed specific training for the acquisition of a gender-sensitive language and the University established a protocol for the use of words, approved in 2020. During COVID-19 lockdown the escalation of domestic violence was associated with a high decrease of reports to police. For protecting and supporting the victims, the Italian government issued the Law n.69/2019, according to the principles of Istanbul Convention 2011.

The university together with CRUI launched "[Call 1522](#)", a secure telephone number where victims can ask for help.

**TEACHING**

- **148** [Course Units](#)
- **3** Post-graduate vocational, specialization and LLL courses
  - [Obstetrics and Urogynecological Rehabilitation](#)
  - [Gender Medicine and Health: from Laboratory Research to Clinic and Healthcare Organisation](#)
  - [Management for Coordinating Nursing and Midwifery, Rehabilitative, Technical and Preventive Health Professions \(Qualifying\)](#)

**RESEARCH**

- **7** Publications (Scopus 2017-2021)
- **1** [Project](#)

**THIRD MISSION AND SOCIAL ENGAGEMENT**

- **8** [Projects](#)

**INSTITUTION**

The university has adopted specific policies and strategies for the achievement of [Equal Opportunities](#) in the academic community and beyond.

Infrastructures, Plans, Regulations, Reports:

- [Strategic Plan](#)
- [Gender Equality Plan - GEP](#)
- [Positive Actions Plan - PAP](#)
- [Positive Actions Plan - PAP \(updated\)](#)
- [Welfare and Well-being Plan](#)
- [Code of Ethics](#)
- [Gender-sensitive Italian Language Use](#)
- [Guarantee Act Committee \(CUG\)](#)
- [Ombudsperson](#)
- [Referent for the Equal Opportunities](#)
- [Gender Balance Report](#)
- [Changing Tables](#)
- [Pinkamp](#)

Partnerships / Affiliations:

- [RUS](#)
- [RUniPace](#)
- [CRUI Working Group on Gender-related themes](#)
- [Forum Inequalities Diversity \(Forum Disuguaglianze Diversità\)](#)

6 CLEAN WATER AND SANITATION



SDG6

## CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all





## TEACHING

**91** Course Units

## RESEARCH

**19** Publications,  
**2** Projects

## THIRD MISSION AND SOCIAL ENGAGEMENT

**3** Projects

## INSTITUTION

**1** Infrastructure,  
**2** Plans,  
**1** Regulation

Fighting against any kind of pollution and irresponsible consumption is a key topic for UnivAQ research, teaching, cooperation and outreach activities. UnivAQ contributes to SDG6 (connected with SDG8, SDG12 and SDG16) implementing activities focused on clean water protection, sanitisation, and wastewater recycling and organising campaigns/ events for awareness rising on water shortage and pollution of the sources.

### Implemented and ongoing actions:

- replacement of appliances with those minimising the use of water (water taps, aerator nozzles and dual flush toilets): in 2021 achieved 60%
- instalment of drinking water fountains on campuses
- rain-water collection and storage:
  - o In 2021 the project concerning the equipment of the parking area at Roio Campus with a rainwater channeling system has been completed. The collected water is used for the Environmental and Maritime Hydraulic Laboratory and for cleaning.
  - o Similar projects are in phase of realization in the other campuses.
- Stop Single Use Plastic Campaign and distribution of bottles
- regulations for the treatment of wastewater produced in the Laboratories.

The University buildings are integrated in the municipal aqueduct network and connected to city sewage treatment plants managed by GSA (GranSasso Acqua).

## TEACHING

- **91** Course Units

## RESEARCH

- **19** Publications (Scopus 2017-2021)
- **2** Projects

## THIRD MISSION AND SOCIAL ENGAGEMENT

- **3** Projects

## INSTITUTION

Infrastructures, Plans, Policies and Regulations:

- Strategic Plan
- Fountains for Fresh Water Use
- Policy on Wastewater Disposal

Partnerships:

- Gran Sasso Acqua S.p.A. - GSA

7 AFFORDABLE AND  
CLEAN ENERGY



SDG7

## AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable  
and modern energy for all





**TEACHING**  
154 Course Units

**RESEARCH**  
245 Publications  
12 Projects  
4 Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**  
6 Projects

**INSTITUTION**  
2 Structures  
2 Plans

Energy is the key pillar of social development and demand is continuously increasing. Providing clean energy, increasing energy efficiency and promoting wise usage are the fields on which UnivAQ is working for the attainment of the SDG7 and a core part of the Strategic Plan.

Contribution to SDG7 is connected with SDG11, SDG13 and indirectly with SDG8 and SDG9, and concerns

- roadmap for achieving carbon neutrality,
- instalment of solar panels producing and use clean energy,
- instalment/replacement of devices with low energy consumption and of Class A appliances,
- campaigns/events for awareness rising on no-carbon energy production and use reduction.

**MAIN INDICATORS for MEASURING THE PROGRESS, Achievement 2021**

- Energy efficient appliances (led bulbs inside and outside, efficient ceiling heating system, thermostats, sensors) 75%
- Elements of green building implementation (substitution of windows, installation of solar shading, natural ventilation) 3
- Total campus smart building area 98544 m<sup>2</sup>
- Smart Building implementation (total floor area of smart building / total all floors building area) 75%
- Number of renewable energy sources 3
- Capacity produced:
  - o Solar Power 97.323 kWh
  - o Combine Heat and Power 311659 kWh
- Ratio of renewable energy from Photovoltaic panels divided by total energy usage per year 3%

- CO2 emission in metric tons (average 2020-2021) 4607

A fundamental role in achieving SDG7 is played by the Energy Manager, who has the task to analyse, monitor and optimise the energy use of the University.

**TEACHING**

- **154** Course Units

**RESEARCH**

- **245** Publications (Scopus 2017-2021)
- **12** Projects

**THIRD MISSION AND SOCIAL ENGAGEMENT**

- **6** Projects

**INSTITUTION**

Structures, Policies, Plans, Regulations:

- EX-EMERGE - Centre of EXcellence on Connected, Geo-localized and Cyber-secure vehicles
- CITRAMS - Sustainable Transport and Mobility Research Centre
- Strategic Plan
- Energy manager
- Inventory of greenhouses gases production in the University
- Roadmap for carbon neutrality (pag.88)

8 DECENT WORK AND  
ECONOMIC GROWTH



SDG8

## DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth,  
full and productive employment and decent work for all





## TEACHING

**103** Course Units  
**3** Post-graduate vocational, specialization and LLL courses

## RESEARCH

**46** Publications  
**7** Projects  
**4** Research Contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

**10** Projects

## INSTITUTION

**3** Infrastructures  
**4** Plans  
**2** Regulations

The main commitments of UnivAQ as knowledge and skills provider and employer concern the preparation of graduates able to access quality jobs and the creation of safe working place. Thus, the contribution to SDG8, besides proper teaching and research, consists of events aiming to encourage entrepreneurship, creativity and innovation with the support of university, promotion of principles and policy goals for ending any kind of discrimination in the workplace, including disabilities, and surveillance (CUG).

Article 5 of Code of Ethics contains all the principles on which the actions for the achievement of the end of any kind of discrimination are rooted, that includes those related to the workplace.

The Guarantee Act Committee (CUG) carries out proactive, consultative and assessment tasks, contributing to optimise employees' productivity and improve their efficiency by guaranteeing a work environment characterised by respect for all principles of equal opportunity, organisational well-being and measures towards any form of discrimination and/or moral or psychological harassment against employees. The CUG is also committed to manage any possible infraction to the Code of Ethics principles, for ensuring their correct and transparent application.

UnivAQ is fully committed to respect human beings as established in the "Costituzione Italiana" (Art. 37) and in the laws concerning labour-rights. Thus, no forced labor, modern slavery, human trafficking and child labor can be tolerated. Strict surveillance is carried out on the private services and goods providers and in participation to external organizations (Ethic Code, art.15 and 17), that are selected among those ensuring regularly employed workers. Furthermore, UnivAQ subscribed the **manifesto** of UN and many other national and international initiatives to fight against any kind of modern slavery. Special attention is given to immigration for which UnivAQ adopted the four guiding principles of Humanity, Neutrality, Impartiality and Independence adopted by the UN General Assembly.

Concerning the pay scale equity, the first National law concerning the public employment in 1957 speaks of "workers" without distinguishing between female and male worker. This is confirmed in every National Contract subscribed by the Government and Social Parties and the University, as public body, adopts it.

While the equity is ensured by the Italian Constitution, the same cannot be said when considering the equal opportunity in career progression, especially at apical positions. Thus, the **Gender Equality Plan** focuses on the achievement of equal opportunities in getting positions, receiving research funds and in career progressions.

Several plans, regulations and innovative procedures have been established for ensuring a safe and sound working environment.

## HEALTH AND SAFETY AT WORKPLACES

The University of L'Aquila guarantees the protection of the health and safety of its community through the Office of Health and Safety at Work to improve health and safety conditions within the university's facilities. The priority functions of the Service include: the assessment of risks in the different and multiple work activities present in the university (teaching, research and service), the definition of the measures for the control of work risk, the adoption of management measures through the preparation of manuals and regulations, the drafting of emergency plans, the definition of procedures for safe working, the identification of dedicated personnel and their training.

## POST-COVID WORK REORGANIZATION

The huge efforts - in terms of training, new technological equipment and revision of organisational procedures - made at the beginning of the pandemic, provided the staff with an effective model for remote working and its faculties with new teaching tools and skills.

Consequent decisions have been adopted.

**Flexible and remote working**, starting from a pilot experience done before COVID emergency, is now considered an opportunity to adopt a culture of working addressing results instead of working hours number. Staff can now choose and plan a personal strategy of in presence/remote working and achieve a healthier work-life balance.

## WELFARE AND PERSONAL CARE PLAN

UnivAQ supports the academic and technical-administrative staff and promotes work-life balance



### TEACHING

**103** Course Units  
**3** Post-graduate vocational, specialization and LLL courses

### RESEARCH

**46** Publications  
**7** Projects  
**4** Research Contracts

### THIRD MISSION AND SOCIAL ENGAGEMENT

**10** Projects

### INSTITUTION

**3** Infrastructures  
**4** Plans  
**2** Regulations

initiatives by means of a welfare plan which encompasses mobility, subsidies, childcare facilities and summer camps for employees' children.

#### SACS - Listening and Counselling Service

This service, founded in 1991, has always aimed at offering students enrolled in the University of L'Aquila support and help in overcoming difficult periods due to setbacks in their studies or psychological problems. Staff can consult the psychological service.

#### TEACHING

- **103** Course Units
- **3** Post-graduate vocational, specialization and LLL courses
  - o Mobile and Web Technologies
  - o Post-catastrophe Technical and Administrative Management of Local Authorities
  - o Clinical Nursing for Intensive Care Units and Emergency

#### RESEARCH

- **46** Publications (Scopus 2017-2021)
- **7** Projects

#### THIRD MISSION AND SOCIAL ENGAGEMENT

- **10** Projects
- **12** Spin Offs and Start Ups

#### INSTITUTION

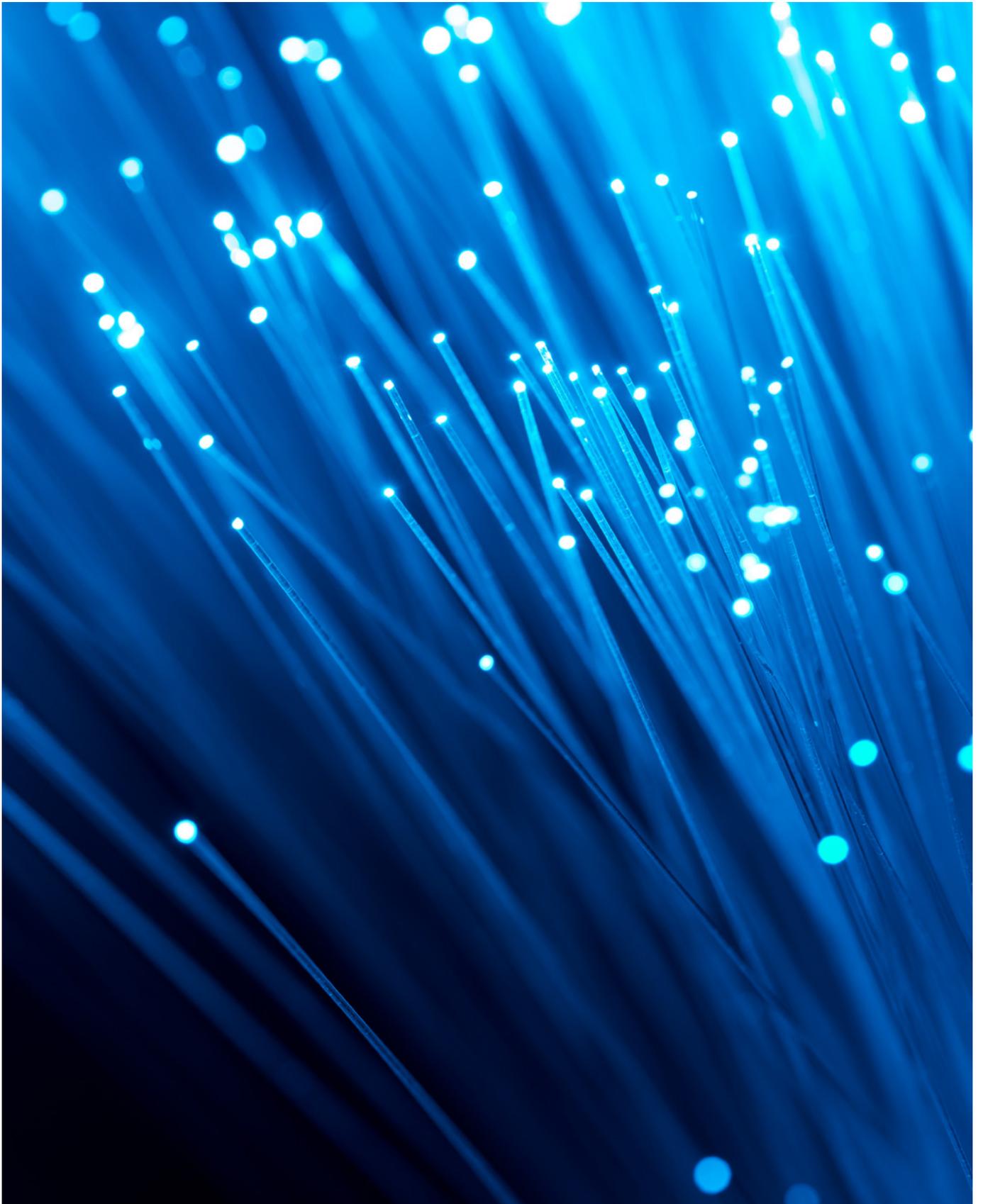
Structures, Policies, Plans, Regulations:

- EX-EMERGE - Centre of EXcellence on Connected, Geo-localized and Cyber-secure vehicles
- CITRAMS - Sustainable Transport and Mobility Research Centre
- Incubatore di creatività
- Guarantee Act Committee (CUG)
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)
- Welfare and Well-being Plan
- Referent for Prevention and Protection Activities
- Referent for the Creativity Incubator
- Referent for Career Guidance and Job Placement
- Referent for Post-graduate Courses and Social Balance
- Initiatives to Support Staff with Disabilities
- SACS - Listening and Counselling Service



## INDUSTRY, INNOVATION AND INFRASTRUCTURES

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation





## TEACHING

**270** Course Units  
**3** Post-graduate vocational, specialization and LLL courses

## RESEARCH

**6** Publications  
**46** Projects  
**27** Research Contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

**12** Projects

## INSTITUTION

**4** Plans  
**8** Infrastructure  
**2** Regulations

**3** Research Centers of Excellence

**7** Departments

**27** Patents

**15.129.405**

**5** Interdepartmental Research Centers

**27** Research Contracts

**18** Spin Offs

Research income from industry and commerce

**46** Projects (24 H2020)

Innovation is a key topic on which UnivAQ research, teaching and civic engagement are rooted. Cooperation between universities and industries is fundamental for growth in productivity, investment in infrastructures and job creation. UnivAQ contributes with production of patents, innovative spin offs, cooperation of students and staff within the regional industrial clusters and the City Living Lab on sustainability also for the physical and social reconstruction of the City fabric after the earthquake.

The INCIPICT project

### **(Innovating City Planning Through Information & Communications Technologies)**

The city of L'Aquila as a test bed for a countless series of experimental projects:

- MAN

The core of the INCIPICT Project is the construction of an experimental optical network to build a MAN - Metropolitan Area Network - that consists in an Optical Ring to connect the main and the most important sites of L'Aquila City.

- Innovative Wireless Technologies

INCIPICT represents the context for testing advanced and pervasive wireless technologies, necessary to prepare the support layer for innovative applications and provides research on techniques solutions for reduction of energy consumption and increase of transmission speed (and bandwidth).

- Middleware

Large relevance is also the component relating to the development of a specific middleware that allows abstracting the components of the heterogeneous network and offering uniform access methods as independent as possible from the specific underlying technology

- 5G Experimentation

Innovative reconstruction L'Aquila city, a 5G experimental ecosystem

- Laboratory of Optics and Photonics

Testbed for fiber-optic Space Division Multiplexed transmission of INCIPICT

The MED-QUAD project

### **(MEDiterranean QUadruple helix Approach to Digitalisation «MED-QUAD»)**

Innovation and technology are recognised as a major driver for competitiveness and for long-run endogenous economic growth. However, most of Mediterranean regions are characterised by a high prevalence of micro enterprises, with difficulties to acquire the necessary skills to innovate and grow. MED-QUAD addresses this challenge through the cooperation among universities in 6 countries. The project aims to nurture the innovation potential of the regions, by building up a cross-border cooperation scheme of the Quadruple Innovation Helix. The main actors are the universities which can improve their capacity to be and act as "civic universities" in cooperation with the cities to which they belong as "anchor" Institutions together with the socio-economic stakeholders and the citizens.

Two cross-border Living Labs are established in the cities, where several pilot activities for technological transfer and commercialisation of research results will be implemented. They exploit ICT technologies and Key Enabling Technologies for water use optimization, consumption and reduction (Smart Water Use Applications - SWUAP), as well as cultural heritage promotion and preservation (Applied Research for Cultural Heritage Exploitation - ARCHEO). The project is setting up a toolkit for enhancing the institutional capacities of businesses, cities and universities of both shores of the Mediterranean to work together and reinforce their role as "catalysts" for fair and inclusive development.

The Research Center of Excellence DEWS

Among the wide variety of research areas in the sphere of high technology, DEWS (**Design Methodologies of Embedded Controllers, Wireless Interconnect and Systems-on-chip**) has focused on the use of advanced

**TEACHING**

**270** Course Units  
**3** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**6** Publications  
**46** Projects  
**27** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**

**12** Projects

**INSTITUTION**

**4** Plans  
**8** Infrastructure  
**2** Regulations

electronics in the interest of society. Research addresses solutions for design, implementation and management of Cyber-Physical Systems, systems containing “logical” control parts and “physical” parts which represent controlled systems, in particular towards wireless distributed control networks.

DEWS is part of the HYCON2 European Network of Excellence on hybrid systems and has research collaboration with prestigious academic institutions world-wide (e.g. the University of California Berkeley, the Royal Institute of Technology Stockholm). AQUILA WEST, a DEWS spin-off, is considered one of the best eight start-ups in Abruzzo.

The Research Center of Excellence EX-EMERGE  
**(Centre of EXcellence on Connected, Geo-localized and Cyber-secure vehicles)**

The main research lines are: 1) wireless technologies for vehicles-to-everything (V2X) and in-car communications, 2) accurate and reliable positioning solutions for vehicles through fusion of multi-sensorial inputs), 3) architectures and algorithms for security and privacy in on-board and vehicle-to-infrastructure operations, 4) dynamic and collaborative navigation that relies on advanced frameworks (namely machine-learning and Artificial Intelligence) and also addresses machine ethics, 5) HW/SW architectures for on-board platforms and back-end.

The Abruzzo Automotive District (Polo Automotive Abruzzo, IAM) and many companies of the ICT/ Aerospace domain are partners major institutions and agencies, among others MiSE, ASI, ESA, GSA, cooperate in the research activities.

The Research Center of Excellence CETEMPS  
**(Center of Excellence in Telesensing of Environment and Model Prediction of Severe Events)**

activities focus on basic and applied research on hydro-meteorological, climatological, atmospheric, chemical and observational experimental issues, at a regional, national and international level.

It has the role of “Centre of competence” for meteorological modelling and radar meteorology. CETEMPS provides the Abruzzi Region with hydro-meteorological forecasting carries out daily forecasting services for RAI3 television and RAI-Radio programmes.

**TEACHING**

- **270** Course Units
- **3** Post-graduate vocational, specialization and LLL courses
  - o Tecnologie Avanzate Applicate Alla Medicina e ai Sistemi Biologici
  - o Emergenza e Maxiemergenza in Area Critica
  - o Mobile and Web Technologies

**RESEARCH**

- **6** Publications (Scopus 2017-2021)
- **46** Projects (**24** H2020)
- **27** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**

- **27** patents and **18** spin offs
- **12** Projects

**INSTITUTION**

Infrastructures, Plans, Policies and Regulations:

- EX-EMERGE - Centre of EXcellence on Connected, Geo-localized and Cyber-secure vehicles
- DEWS - Centre of Excellence of Design Methodologies of Embedded Controllers, Wireless Interconnect and Systems-on-chip
- CETEMPS - Center of Excellence of Telesensing of Environment and Model Prediction of Severe Events
- CITRAMS - Sustainable Transport and Mobility Research Centre
- CERFIS - Research and Teaching Centre for Earthquake Engineering
- DMTA - Molecular Diagnostics and Advanced Therapy Research Centre
- M&MOCS - Research Centre on Mathematics and Mechanics of Complex Systems
- Heritechne - Research Center on innovative methods and technologies for investigating cultural heritage.
- Technology transfer, patents, spin-offs
- Incubatore di creatività
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)

10 REDUCED INEQUALITIES



SDG10

## REDUCED INEQUALITIES

Reduce inequality within and among countries



10 REDUCED INEQUALITIES



## TEACHING

**207** Course Units  
**4** Post-graduate vocational, specialization and LLL courses

## RESEARCH

**3** Publications  
**6** Projects  
**1** Research Contract

## THIRD MISSION AND SOCIAL ENGAGEMENT

**14** Projects

## INSTITUTION

**4** Plans  
**2** Infrastructures  
**3** Regulations

The events of the last two years increased the inequalities and the more disadvantaged groups are at risk of exclusion from the progress recovery. UnivAQ addresses economic- (poor families and poor countries), health- (disability) and cultural- (foreign origin) based inequalities of its students and staff, through targeted actions as public awareness events, Erasmus Charter for Higher Education and Policy, Scholarships schemes for low-income students, financial and learning support for avoiding dropouts, Student Ombudsman and Guarantee Act Committee.

The Strategic Plan 2020-2025 - the Gender Equality Plan (GEP), the Positive Actions Plan (PAP) and the Welfare and Well-being Plan - are designed in order to guarantee the respect of the differences in gender identity, disability, culture and background for all those working and studying at University of L'Aquila.

The goal is to create an inclusive environment that allows students, researchers and staff to pursue their careers successfully, both within the university and beyond its borders. These include:

- **Italian courses for foreign students and visiting staff**
- **Non-discriminatory admissions test: support for students with disabilities**
- **Tuition fee exemption for students with severe disabilities**
- **Accessible facilities for disabled**
- **Job placement for people with disabilities**
- **Services for Students with Specific Learning Disorders**
- **Student Tutors**
- **"Alias" identity**

## MAIN INDICATORS

Students with Disabilities/Students Community	2020: 1,2%	2021: 2,2%
Students from Development Countries/International Students	2020: 3,5%	2021: 4,6%
First-generation students starting a degree/Students starting a degree	2020: 74%	2021: 73%

## OMBUDSPERSON

Students can contact the Ombudsman to report any forms or types of abuse, dysfunctions, shortfalls, delays, violations of the law or the principles of good administration, or lack of respect for values. The Student Ombudsman monitors teaching, research and services activities and reports directly to the Rector the serious cases of infringement of the Code of Ethics.

## CUG - THE GUARANTEE ACT COMMITTEE

CUG makes proposals, provides consultation, ensures equal opportunities, enhances employees' wellbeing, and prevents any kind of discrimination at work, in compliance with Italian Laws and University Statute. It contributes to optimising productivity, improving the efficiency of performance by guaranteeing a work environment characterised by respect for all principles of equal opportunity, organisational well-being and protection from any form of discrimination and/or moral or psychological harassment against employees.

## SERVICES FOR DISABLED

The University of L'Aquila is firmly committed to integrating disabled students into every part of university life. Social aspects, living with other students and group gatherings are all, in fact, unique moments making up the cultural and emotional background gained by a university student. In this perspective university policies strive to eliminate barriers - not only the architectural ones but also those hindering socialization and learning - in order to offer equal study opportunities. To this end a University committee for disabilities made up of professors, technical-administrative staff and student representatives was established to offer assistance to our disabled students and to discuss strategies and issues to be addressed and taken before the university governing bodies. The committee guarantees specialized tutoring services for students with disabilities and also provides materials and adequate support.

## TEACHING

- **207** Course Units
- **4** Post-graduate vocational, specialization, LLL courses

**10** REDUCED  
INEQUALITIES



### TEACHING

**207** Course Units  
**4** Post-graduate  
vocational,  
specialization and LLL  
courses

### RESEARCH

**3** Publications  
**6** Projects  
**1** Research Contract

### THIRD MISSION AND SOCIAL ENGAGEMENT

**14** Projects

### INSTITUTION

**4** Plans  
**2** Infrastructures  
**3** Regulations

- Tecnico di interventi riabilitativi e di analisi del comportamento (ABA) nei disturbi dello spettro autistico
- Applied Behaviour Analysis (ABA) and Evidence-based Techniques for the Treatment of Autistic Spectrum Disorders
- Neuro-Ophthalmology and Visual Neuro-Rehabilitation
- Sports Cardiology

### RESEARCH

- **3** Publications (Scopus 2017-2021)
- **6** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

- University Corridors for Refugees - UNICORE
- **14** Projects

### INSTITUTION

Infrastructures, Plans, Policies, Services and Regulations:

- Guarantee Act Committee (CUG)
- Economical Support to Low Income Students
- Services for Disabled Students
- Student Ombudsman
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)
- Welfare and Well-being Plan



## SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe,  
resilient and sustainable



**TEACHING**

**210** Course Units  
**2** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**460** Publications  
**21** Projects  
**22** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**

**16** Projects

**INSTITUTION**

**10** Infrastructures  
**3** Plans  
**3** Regulations

UnivAQ is strictly interwoven with the City fabric. The interaction with the community has been fundamental for the economic, social and structural reconstruction. L'Aquila is a medieval town rich of cultural and architectural heritage that the university helped to preserve and enhance.

UnivAQ contributes, besides teaching and research, through events for enhancing the role of the City as hub of culture and innovation, cooperation with associations and public bodies for protecting art and heritage, place-based teaching methods, university choir, Casa-Teatro, its Museum PomAQ and several cultural events.

**CULTURAL EVENTS OPEN TO CITY**

Average 2020/2021: 160 per year

**Festival dello Sviluppo Sostenibile (Sustainable Development Festival)**

The Festival is organized every year by the ASviS - Associazione Italiana per lo Sviluppo Sostenibile, as a way of marking European Sustainable Development Week. University of L'Aquila has been taking part in this event since its first launch in 2017.

ASviS is a partner of the Italian University Network for Sustainable Development (RUS), network which includes our university. During the Festival, UnivAQ organizes a rich programme of events which are open and freely accessible to the general public.

**Climbing for Climate**

Organised by the network of the Universities for the sustainable Development (RUS) the Climbing for Climate is a demonstration event aiming to drive the attention to the climate changes focusing on the health conditions of the glaciers.

Rectors of several Italian Universities climb the mountains and reach significant places where the effects are particularly evident. A symbolic plaque is placed. UnivAQ participated to all the editions.

**Open Territories (Territori Aperti)**

The project, born from an idea shared between the Municipality of L'Aquila and the University of L'Aquila, and funded by a subscription among workers enrolled in CGIL, CISL and UIL, is an interdisciplinary center for documentation, training and research, which acts as a promoter node of an international

network of expertise on all aspects of the prevention and management of natural disasters, as well as the reconstruction and development processes of the affected areas.

The name **Territori Aperti** intends to underline the idea that its activities are based on collaboration with other territorial systems exposed to the risks of natural disasters, in a spirit of social sharing of data, analytical methods and skills generated by the project, according to the Open Science approach and the informed participation of citizens in political choices.

**STRUCTURES AND SERVICES OPEN TO THE CITIZENS****Libraries**

The free access to the libraries is guaranteed to all people, both Italian and international students, researchers and professionals who for some cultural and/or professional reasons are in the Region Abruzzo, not only the residents in the City of L'Aquila. According to Art.3 of Regolamento Generale dei Servizi del Sistema Bibliotecario di Ateneo these users can access to all the resources and services: consultation, lending, Inter Library Loan, assistance and orientation, including the use of computers and internet (Art. 4). Furthermore, since 2017 online services are extended to all citizens through the National Identification Code, provided to all people who have an assigned fiscal code. Through this Code, users can ask and get the login access credentials.

**PomAQ**

University Museum Centre coordinates the activities of the University Museum (POMAQ) which holds the University's collections. These include exhibitions, seminars, lectures, visits and training also in the roman and pre-roman archaeological site of "Amiternum" belonging to the university, addressed to students of any level, experts and general public. POMAQ has been established with the aim to protect, preserve and enhance the historical heritage of the University concerning both scientific and humanistic sectors. Visitors can discover and better understand the culture produced by university research and its tools. UnivAQ, also in cooperation with other Museums and cultural associations of the City, organizes and hosts exhibitions of works of

**TEACHING**

**210** Course Units  
**2** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**460** Publications  
**21** Projects  
**22** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**

**16** Projects

**INSTITUTION**

**10** Infrastructures  
**3** Plans  
**3** Regulations

art and artefacts within the POMAQ premises or in the Congress Centre of the University, an historical building of XII century.

**Archeological Site "Amiternum"**

The university purchased an area within the archeological site of Amiternum, a roman city built on the remains of pre-roman settlements. The area presents a stratified series of constructions covering several centuries of history. Citizens of every age can visit the site and participate to the numerous events organized there.

**The Green spaces and the Alpine Garden "Campo Imperatore"**

About 300.000 sqm of the University Campuses are green areas that are open to the citizens. These include the Botanic Garden and the Alpine Botanic Garden "Campo Imperatore", one of the most ancient mountain gardens, rich of rare species and biodiversity. Located at an altitude of 2117 meters above sea level it is also a test bed for climate changes observation and monitoring.

**CULTURAL ASSOCIATIONS OF UNIVERSITY STUDENTS AND STAFF OFFERING CULTURAL EVENTS/EXHIBITIONS**

The university contributes to the cultural offer of the City that boasts a rich classical music and theater tradition carried on by institutions well known all over the world. UnivAQ cooperates actively with them aiming to transmit this tradition to its students.

**University Choir**

The Choir of the University of L'Aquila is open to the participation of students, teachers, and technical-administrative staff interested in the virtuous experience of a cappella choral singing. Together with the choral practice, the activities of the choir include the study of the choral repertoire through proactive listening that helps to develop the musical ear, to reconnect with oneself, and to socialize.

**Casa Teatro**

Relevant is "Casa del Teatro", a theatre culture project, created in 2003 with scientific consultation provided by UnivAQ teachers M. Schino and F. Taviani, and the theatre festival "ARIA", arrived in 2021 at the fourth edition.

Experimental theatre and music performances are organized and managed directly by groups of students and University Choir.

**THE SAH Project**

The wider objective of the project is to update and improve the quality of curricula in the sphere of Sustainability for Architectural Heritage (Historic BIM and Urban Historic Landscapes) in Armenia and Iran to meet the needs of sustainable development of a global market. Specific project objectives are development and testing of new interdisciplinary training models for BA and MA degree level curricula of architectural practical-oriented education for Architectural Heritage, in order to form modern professional competences of specialists, responding to the needs of a sustainable society in the sphere of Architectural Heritage.

The main idea is to form a core of knowledge (new curricula and syllabi for degree courses) for the formation of a new type of architect-restorers with a good scientific base who are able to adapt to the technological evolutions and provide innovative solutions for heritage structures. The Network of Multidisciplinary Centres of "Sustainability for Architectural Heritage" (NSAH) for the creative training of architect-restorers in the context of interdisciplinary skills will use the up-to-date video conferencing technologies for students and members to access lectures and seminars conducted by lecturers from leading EU universities.

**THE CHIC Project**

The project concerns shaping and transferring the cultural heritage of Europe, its multicultural image, transnational character, which are the basis for the sense of social and cultural unity of Europeans and for strengthening European identity and active citizenship. The city is understood as a tool for finding a cultural community between the national heritage of partner countries and the cultural heritage of Europe. This is particularly important in the period of intensified migration and the phenomenon of cultural transformation, where the boundaries of national cultures are blurred and create multiple identities. It is equally important for native Europeans to understand the cultural community of nations and



## TEACHING

**210** Course Units  
**2** Post-graduate vocational, specialization and LLL courses

## RESEARCH

**460** Publications  
**21** Projects  
**22** Research Contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

**16** Projects

## INSTITUTION

**10** Infrastructures  
**3** Plans  
**3** Regulations

minority and majority societies that make up Europe. This approach to cultural heritage equips young people with new civic competences, expected in the labor market in a multicultural society. The project strengthens the internationalization of partner universities, supports the professional development of lecturers, implements the principles of the Bologna system and the modernization agenda of higher education. Introduces modern teaching methods and a modular learning (blended learning) program based on stationary classes and e-tutorials.

### THE B-READI Project

#### (Building Reliable Effective and Aware Disaster emergency and prevention managing skills – B-READI)

Communities and public and private companies need new and modern ways to design integrated emergency plans not only to manage the consequences of a disaster, but also and above all to design in peacetime, strategic and integrated planning, to ensure in the event of a crisis, that communities resume socio-economic and productive activities promptly. This requires the creation of a network of interconnected and interdisciplinary skills and competencies in advance of a disaster, to provide rapid responses and to better manage the complexities of the recovery process.

The reliability and effectiveness of such an approach requires managerial governance capabilities. In recent years, due to the increase in crises, the profile of an Emergency Manager has been developed, and some types of certifications are offered nationally and internationally but are not linked to a university curriculum. Often holders of such certifications start working as police officers, detectives, firefighters, security technicians, police dispatchers, paramedics and others who have gained considerable experience in civil protection.

## TEACHING

- **210** Course Units
- **2** Post-graduate vocational, specialization and LLL courses
  - o Post-catastrophe Technical and Administrative Management of Local Authorities
  - o Clinical Nursing for Intensive Care Units and Emergency

## RESEARCH

- **460** Publications (Scopus 2017-2021)
- **21** Projects

## THIRD MISSION AND SOCIAL ENGAGEMENT

- **16** Projects

## INSTITUTION

Infrastructures, Plans, Policies and Regulations:

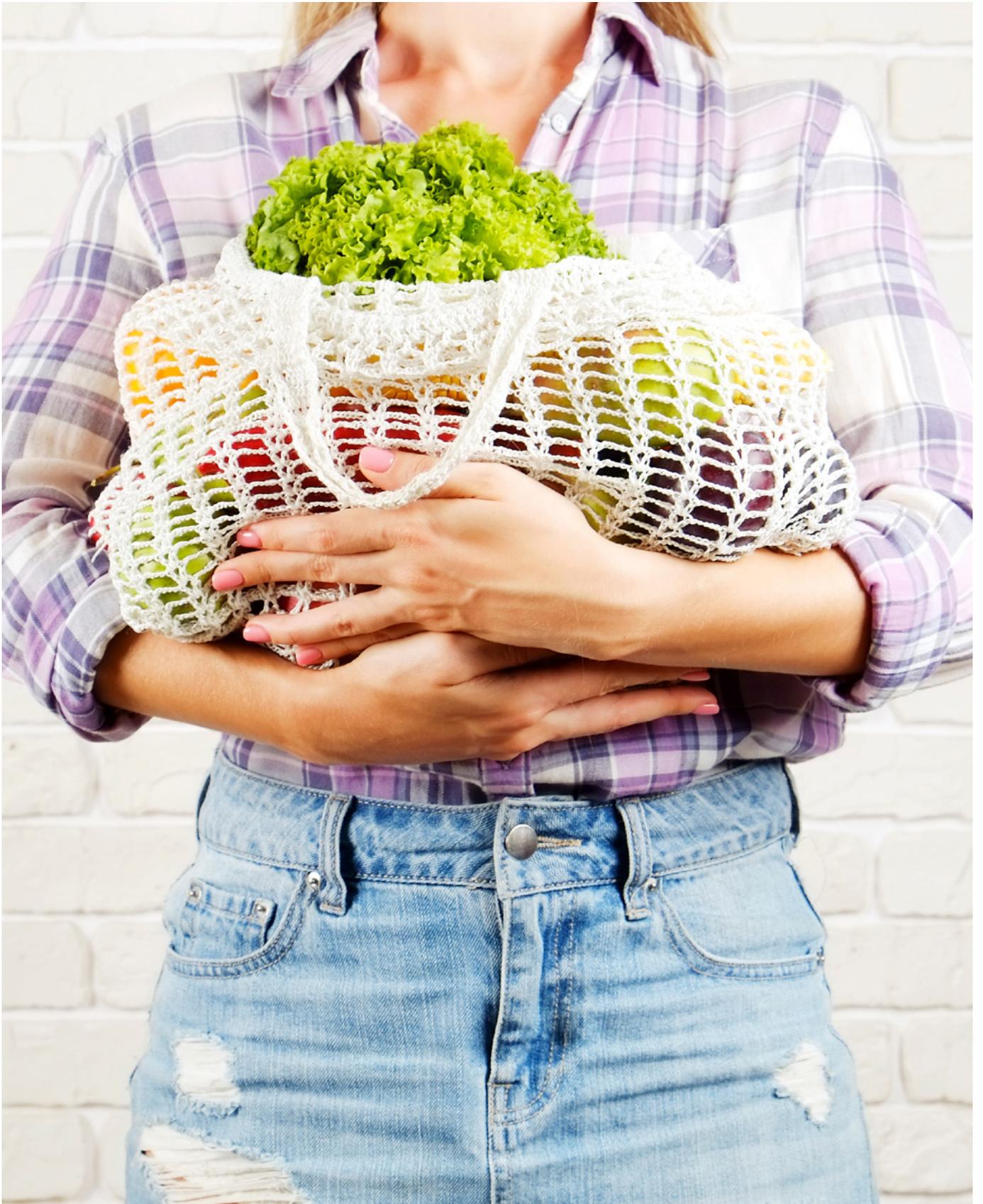
- EX-EMERGE - Centre of EXcellence on Connected, Geo-localized and Cyber-secure vehicles
- DEWS - Centre of Excellence of Design Methodologies of Embedded Controllers, Wireless Interconnect and Systems-on-chip
- CETEMPS - Center of Excellence of Telesensing of Environment and Model Prediction of Severe Events
- CITRAMS - Sustainable Transport and Mobility Research Centre
- CERFIS - Research and Teaching Centre for Earthquake Engineering
- DMTA - Molecular Diagnostics and Advanced Therapy Research Centre
- M&MOCS - Research Centre on Mathematics and Mechanics of Complex Systems
- Heritechne - Research Center on innovative methods and technologies for investigating cultural heritage.
- Territori Aperti / Open Territories - Interdisciplinary center for documentation, training and research
- POMAQ - University Museum Centre
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)
- Mobility Manager
- Energy Manager

Partnerships:

- o CINI - Consorzio interuniversitario nazionale per l'informatica
- o RUS

## RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns





**TEACHING**  
**143** Course Units

**RESEARCH**  
**843** Publications  
**7** Projects  
**4** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**  
**7** Projects

**INSTITUTION**  
**4** Infrastructures  
**4** Plans  
**2** Policies  
**3** Regulations

The abuse of resources underneath the industrial core cycle has caused huge environment damages. UnivAQ is strongly committed to operate on the two sides: consumption/waste reduction and sustainable production. Activities and results addressing SDG12 consist of events on proper waste treatment and recovery of materials from WEEE and other products, procurement policies ensuring the ethical and sustainable practices in the supply chain, rules for waste reduction and correct collection. Special focus on plastic and paper use reduction for which specific directives are issued.

The University adopted a very detailed Regulation about waste disposal on the base of a policy coherent with the main European Directives and National Decrees DL. 152/2006 and recent DL. 116/2020, on which regional and municipal directives are based for the concrete waste management.

The Workplace Safety and Security Unit (IGI) supports the structures for the collection of produced waste and monitors the process till the final correct disposal of each kind of product. Traceability of hazardous waste is ensured by a loading and unloading register.

Concerning the Municipal waste management, the University carries out separate collection of plastic, paper, cans, glass, toner cartridges and batteries in all the campuses for which the collection and recycling is implemented by the municipal agency AMS.

### TEACHING

- **143** Course Units

### RESEARCH

- **843** Publications (Scopus 2017-2021)
- **7** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

- **7** Projects

### INSTITUTION

Infrastructures, Plans, Policies, Regulations:

- EX-EMERGE - Centre of EXcellence on Connected, Geo-localized and Cyber-secure vehicles
- CETEMPS - Center of Excellence in Telesensing of Environment and Model Prediction of Severe Events
- CITRAMS - Sustainable Transport and Mobility Research Centre
- Policy on waste reduction, treatment and disposal
- Policy on Wastewater Disposal
- Strategic Plan
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)
- Fountains for Fresh Water Use
- Stop Single Use Plastic
- Energy Manager

13 CLIMATE ACTION



SDG13

## CLIMATE ACTION

Take urgent action to combat climate change and its impacts





## TEACHING

**167** Course Units  
**1** International Master degree in Atmospheric Science and Technology

## RESEARCH

**1.665** Publications  
**10** Projects  
**9** Research Contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

**7** Projects

## INSTITUTION

**3** Infrastructures  
**2** Plans  
**4** Regulations

Climate Change is a crucial field for UnivAQ. Starting from 2001 the excellence research Center CETEMPS developed high competencies, strategies and tools for assessing Climate Change impact and tackle the consequences. UnivAQ contribution concerns, besides specific teaching and research, events on Climate Change risks and mitigation, cooperation with NGOs for Civil Protection and volunteering activities, support for policy making to regional and national authorities, roadmap for achieving carbon neutrality. Experiences and know-how are shared with Institutions from EU and non-EU countries for reinforcing the global commitment to reduce the use of carbon generated energy.

**Campus carbon footprint:** Analysis and monitoring are carried out on the three major CO<sub>2</sub> emission sources: electricity, heating and mobility.

The main policies concerning electricity and heating consist of reduction (through sensors, surveillance, replacement of devices with the highly efficient ones), increase of solar panel instalment for internal production, and identification of energy providers among those who guarantee at least 80% from renewable sources.

Concerning mobility, that is mainly due to home-work/study commuting, specific actions are ongoing in cooperation with the Municipal Agency for mobility AMA. Activities concern the promotion of car sharing, encourage the bicycle usage, reduction of travel tickets. At the same time the university has made infrastructural works for increasing the number of bicycles' racks

### Zero Emission Vehicles (ZEV) Policy on Campus

The main measures adopted for achieving a sustainable mobility are:

- replacement of traditional cars with hybrid cars (in 2020: 2 cars purchased) for the academic and administrative staff
- improving parking lots for bicycle
- car-free campuses, with parking lots outside the campuses' fences

**Energy Manager:** has the institutional mission to analyse and propose structural interventions for the reduction of energy consumption (efficient and renewable energy production, installation of energy saving devices).

The plan foresees a 20% of carbon produced energy consumption reduction per year for achieving Carbon Neutrality by 2050.

**Mobility Manager:** has the institutional task to promote sustainable, shared a low-impact mobility, with the aim of reducing the environmental footprint and greenhouse gases emissions of the commuting activities of the entire university population. After the analysis of a questionnaire submitted to the academic community, he is preparing an Inter-Campus Sustainable Mobility Plan (PAMSI) for the integrated development of urban mobility and urban settlement between and within university campuses, taking into account, as a priority, home-work and home-university travel.

### Greenhouse gas emission inventories in Italian universities:

As a member of the RUS Climate Change Working Group, the university contributes to the objective to achieve a reliable estimate of the emissions of Italian universities in the future, as a necessary basis for formal commitments to reduce them.

### CITRAMS - Sustainable Transport and Mobility Research Centre

It is an inter-departmental Center that promotes and coordinates research activity, technological transfer and dissemination in the transportation sector (passengers and goods) and in sustainable mobility, with particular attention to:

- Transport infrastructure planning and relative socio-economic management issues
- Theoretical and modelling analysis of supply and demand and their interaction
- Advanced transportation systems (land, air, naval, intermodal and multimodal) and technological innovation of their components
- Low impact innovative propulsion systems and technological innovation of their components
- Interaction between transportation and the physical/social environment, education, health, disability and aging

### THE UPGRADE Project

Urban and transPortation reGeneration for Reducing Automobile Dependency in mEna

UPGRADE's wider objective is to employ multidisciplinary education and research to help



### TEACHING

**167** Course Units  
**1** International Master degree in Atmospheric Science and Technology

### RESEARCH

**1.665** Publications  
**10** Projects  
**9** Research Contracts

### THIRD MISSION AND SOCIAL ENGAGEMENT

**7** Projects

### INSTITUTION

**3** Infrastructures  
**2** Plans  
**4** Regulations

transportation businesses address the challenges of unprivileged sectors of society using innovative solutions. UPGRADE focuses on unprivileged minorities as a case study to solve not only their Transportation and Urban Mobility Planning everyday problems, but also to try to upgrade their economic status, through studying the land use of the accommodated settlements to help them look for income-generating opportunities and a more interesting lifestyle.

### TEACHING

- **1** International Master degree in Atmospheric Science and Technology
- **167** Course Units

### RESEARCH

- **1.665** Publications (Scopus 2017-2021)
- **10** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

- **7** Projects

### INSTITUTION

Infrastructures, Plans, Policies, Regulations:

- CETEMPS - Center of Excellence in Telesensing of Environment and Model Prediction of Severe Events
- CITRAMS - Sustainable Transport and Mobility Research Centre
- Alpine Botanical Garden of Campo Imperatore, as testbed for early detection and witness of climate change impact
- Strategic Plan
- Car Pooling
- Pilot bicycle sharing plan
- Mobility Manager
- Energy Manager

Partnerships:

- o RUS
- o Municipality of L'Aquila
- o Region Abruzzo
- o Civil Protection Department
- o Firefighters Department



SDG14

## LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development





**TEACHING**  
**103** Course Units

**RESEARCH**  
**62** Publications  
**8** Projects  
**5** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**  
**4** Projects

**INSTITUTION**  
**2** Infrastructures  
**4** Plans  
**2** Regulations

UnivAQ is aware of the crucial role of oceans, rivers, lakes and streams in the ecosystem. The City is located at the crossway of 2 National and 3 Regional Parks and in a place rich of quality water sources, that need to be preserved and enhanced. Research and teaching are the key tools for the achievement of this goal in strict cooperation with local communities. Contribution of UnivAQ to SDG14, concerns campaigns/events for awareness rising on water quality, marine litter, climate change, toxic chemicals, shipping and coastal wave protection, stop single use plastic campaign, clear policy on water disposal and instalment of drinkable water fountains in the campuses.

The Referent for the natural heritage enhancement has the task to manage the relations with the Abruzzo Region, the four Parks on which sites the University and the City of L'Aquila are located and coordinate the monitoring and surveillance activities. Furthermore, specific expertise is provided by UnivAQ academic staff for the preparation and implementation of projects in the concerned areas and beyond, providing a multidisciplinary approach to the identification and solutions of problems

#### **The ADRIAMORE project** **Adriatic DSS exploitation for MOonitoring and Risk management of coastal Extreme weather and flooding - ADRIAMORE**

Capitalises the results of IPA Adriatic projects ADRIARadNet and CapRadNet and improves the existing platform integrated hydro-meteorological risk management of the cross-border coastal areas. The project fosters the exchange of best practices of institutional governances and provides support to maritime navigation, air traffic control and urban water management authorities, whereas its outputs

will be available to all citizens through the improved Decision Support Systems platform. Radar-based software to monitoring coastal flood, 1 firefighting boat, 1 wind profiler installed and operative, 1 hydrological model software PAI - Pilot Action along Italian coastlines PAC - Pilot Action along Croatian coastlines

#### **TEACHING**

- **103** Course Units

#### **RESEARCH**

- **62** Publications (Scopus 2017-2021)  
- **8** Projects

#### **THIRD MISSION AND SOCIAL ENGAGEMENT**

- **4** Projects

#### **INSTITUTION**

Infrastructures, Plans, Regulations:

- Stop Single Use Plastic
- Policy on Wastewater Disposal
- Fountains for Fresh Water Use
- Referent for the natural heritage enhancement

Partnerships:

Cooperation with the Region Abruzzo and the four National and Regional Parks

- o Region Abruzzo
- o Parco Nazionale d'Abruzzo, Molise e Lazio
- o Parco Nazionale del Gran Sasso e dei Monti della Laga
- o Parco Nazionale della Maiella
- o Parco Regionale Sirente Velino

15 LIFE ON LAND



SDG15

## LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss





**TEACHING**  
132 Course Units

**RESEARCH**  
187 Publications  
8 Projects  
2 Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**  
5 Projects

**INSTITUTION**  
2 Infrastructures  
4 Plans  
2 Regulations

One of the key concerns of UnivAQ is the loss of biodiversity in a region that is rich of it and aware since decades of the crucial need of protection. The city is located in a valley under the highest mountains of the Apennines and at a distance of 100 Km from both the Adriatic and Tyrrhenian Seas, in the middle of 2 National and 3 Regional Parks.

Data concern proper teaching and research, events for awareness rising on risks deriving from loss of biodiversity, short courses addressed to schools, enhancement of "Giardino Alpino" as relevant example of alpine ecosystem, cooperation with the Parks in teaching, research and innovation.

### Giardino Alpino di Campo Imperatore

The University manages the Alpine Botanical Garden of Campo Imperatore situated at an altitude of 2117 meters and set in the heart of the Gran Sasso and Laga Mountains National Park. Founded in 1952 by the botanist Vincenzo Rivera to cultivate and study the most important flora found on the Italian Gran Sasso Massif, today it represents an important element of our national heritage and is a well appreciated asset within the cultural and natural scenario of the Region. The Garden is one of a kind in Abruzzo and in the entire Apennine area, especially due to the high altitude and geographical position allowing to cultivate flora of scientific interest.

Furthermore, for its special position, it is becoming an important antenna for an early detection of the Climate Changes effects.

### The LEGO Project

**LEarning GenOmics for food safety** - LEGO project bridges a growing educational gap in the field of higher education by defining, training and promoting the recognition of an innovative and interdisciplinary professional curriculum, called "Food Microbial Bioinformatician". The creation of this new profile allows to meet the new research challenges in the field of genomics applied to food safety.

Increased accessibility and decrease in the cost of Whole Genome Sequencing (WGS) using Next Generation Sequencing (NGS) have revolutionised clinical and public health microbiology.

High resolution typing for foodborne pathogens is

becoming the new standard for WGS data analysis in outbreak investigations and source attribution. The advent of the "Omics Era" with WGS data routinely produced in Food Microbiology requires professional profiles properly qualified to operate in this specific sector.

Despite the recommendations set by the European Commission and the Food and Agriculture Organisation of the United Nations, recent developments in NGS research have not always been accompanied by the implementation of specific university curricula aiming at training highly specialised professionals with multidisciplinary skills in Genomics, Food Microbiology, Statistics, Epidemiology and Bioinformatics.

### TEACHING

- **132** Course Units

### RESEARCH

- **187** Publications (Scopus 2017-2021)
- **8** Projects

### THIRD MISSION AND SOCIAL ENGAGEMENT

- **5** Projects

### INSTITUTION

Infrastructures, Policies, Plans and Regulations:  
Infrastructures, Plans, Regulations:

- Stop Single Use Plastic
- Policy on Wastewater Disposal
- Alpine Botanic Garden of "Campo Imperatore"
- Referent for the natural heritage enhancement

Partnerships:

Cooperation with the Region Abruzzo and the four National and Regional Parks

- o Region Abruzzo
- o Parco Nazionale d'Abruzzo, Molise e Lazio
- o Parco Nazionale del Gran Sasso e dei Monti della Laga
- o Parco Nazionale della Maiella
- o Parco Regionale Sirente Velino



SDG16

## PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels





**TEACHING**  
172 Course Units

**RESEARCH**  
412 Publications  
14 Projects  
4 Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**  
20 Projects

**INSTITUTION**  
4 Infrastructures  
1 Policy  
4 Plans  
2 Regulations

Equity cannot be ensured without Peace and Justice. UnivAQ supports all the activities promoting justice at individual and collective level as well as provides a strict surveillance on possible distortion of rules. The peaceful integration of the international students is constantly supported and enhanced by the whole academic community. UnivAQ contributes through targeted teaching and research, cooperation projects for extending the principles of democratic governance of the university, rules and policies for ending bullying, harassment, prejudice, corruption, bribery.

All the institutional documents concerning the policy-making decisions, the regulations, the democratic management processes, the official plans and reports are accessible in the university's web site, in compliance with a Transparency Policy.

In compliance with the Italian Constitution, the **UnivAQ Statute** affirms the founding principles of the University and, among these, at art.1, the academic freedom in teaching and research activities.

Furthermore, **the Statute** establishes the governance bodies and regulates their composition and the modalities for the democratic election of representatives of the three categories: academic staff, administrative and technical staff, students.

The three main governance structures:

- Rector,
- Academic Senate
- Administration Board

are elected by the three components and have their representative in them.

The participation of students is ensured by the Students' rights Chart.

Students' right to freely associate and fully participate to the UnivAQ missions and decisions representing their political and welfare interests is ensured by Art. 3 of the university Statute.

The "**Consiglio Studentesco**" - Students' Council is the official student representative body.

It consults with and makes proposals to the Academic Senate and to the Board of Administration.

The members of the Students' Council are elected by the student community among union's lists constituted for the aim.

Internal and external committees that monitor and assess the quality of processes and results constitute the **Quality Assurance System**.

The (internal) Quality Control Committee, is composed by representatives of faculty, staff and students and has the task to:

- Define and propose a system of quality assurance and self-evaluation for all courses offered (first, second and third level, LLL courses, etc.)
- Monitor teaching and training results obtained making them accessible for quality assurance and assessment
- Promote the culture of quality in all the activities.

**Documents and Reports** are available to the National Quality Assurance Agency ANVUR and MUR.

UnivAQ intends to play the role of **Civic University**, thus promotes the engagement of targeted participatory bodies, including local stakeholders and governments.

Experiences and know-how are transmitted to other institutions in the world through cooperation projects.

The **Code of Ethics** guides the achievement of the fundamental values on which the university community is rooted, such as respect of individual rights together with the recognition of the duties and responsibilities towards the institution and the rules of conduct to abide by. Such rules have the objective of preventing discrimination and harassment and any sort of corruption & bribery as well as the contacts with organized crime.

The **Ethical and Behavioral Code** describes the rules that all components of the academic community must follow in the implementation of the institutional activities.

Furthermore, UnivAQ, for the acquisition of good and services, strictly applies the principles of Italian Procurement Code (Law 50/2016 art. 80) fighting any kind of crime and bribery.

## TEACHING

- **172 Course Units**



## TEACHING

**172** Course Units

## RESEARCH

**412** Publications  
**14** Projects  
**4** Research Contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

**20** Projects

## INSTITUTION

**4** Infrastructures  
**1** Policy  
**4** Plans  
**2** Regulations

## RESEARCH

- **412** Publications (Scopus 2017-2021)
- **14** Projects

## THIRD MISSION AND SOCIAL ENGAGEMENT

- **20** Projects

## INSTITUTION

Infrastructures, Plans, Policies, Regulations:

- University Statute
- Student Bill of Rights
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)
- Guarantee Act Committee (CUG)
- Vice Rector for Communication
- Referent for Institutional and Regulatory Framework
- Referent for the Relationships with the Penal System
- Referent for the Network of Italian Universities for the Peace

Partnerships:

- RUniPace



## PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development



**TEACHING**

**259** Course Units  
**1** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**283** Publications  
**11** Projects  
**9** Research Contracts

**THIRD MISSION AND SOCIAL ENGAGEMENT**

**12** Projects

**INSTITUTION**

**1** Infrastructures  
**2** Policies  
**4** Plans

The Italian “National Strategy for the Sustainable Development”, based on UN Agenda 2030, established in 2017, focuses on 5 areas (5 P): People, Planet, Prosperity, Peace, Partnership. Meetings with all stakeholders have been organised for identifying the implementation roadmap. UnivAQ actively participates to the design of the national Sustainable Development policy as member of RUS (Network of Sustainable Universities) and RUniPACE (Network of Universities for Peace) and as expert in almost all the topics addressed by SDGs, and seats on national and international roundtables in support of policy-making strategies.

After the destroying earthquake of 2009, UnivAQ revised its approach to teaching and research, reinforcing the relevance of the third mission. The reconstruction has transformed L'Aquila, the sixth historical centre in Italy for quantity and relevance of monuments, in a pilot smart city integrating new infrastructures and technologies in a medieval context.

A new interpretation of the third mission provided academic community, policymakers, companies and citizens with tools and methodologies for tackling the present social challenges.

**SUSTAINABILITY NETWORKS**

UnivAQ reinforced efforts in different fields of expertise to increase the presence in international communities and contribute towards achieving the SDGs both locally and internationally

**INTERNATIONAL MOBILITY**

International mobility programs, Erasmus+ for study and internship, which allows students to spend a period ranging between 3 and 12 months in another European university for study, and a period ranging between 3 and 6 months for internship. Outgoing and incoming mobility outside Europe is also financed by Erasmus+ as well as university funds.

**STRATEGIC PLAN**

Strategic Plan supports actions aiming to open the university to the world involving the whole academic

community in projects addressing the social sphere by sharing knowledge for the common benefit. In teaching, research and relationship with society at large, UnivAQ implements several development projects and built up database on crucial sectors of social life.

**The PALIB project  
(Palestinian Research and Library Platform)**

The wider objective of PALIB is to enhance the capacity building of high education in terms of widening literature resources of Palestinian students, academicians, and researchers, including those in Gaza Strip, by building a cross-platform that has two main goals/gates:

- To connect all library digital items of local universities and centres together,
- To build a research gate for Palestinian universities that is customizable with respect to different research aspects, adopting the European experience on building such databases.

**The INTERMATH project  
Erasmus Mundus Joint Master Degree (EMJMD)  
INTERMATH - Interdisciplinary Mathematics**

It is a Network of 21 Universities, 13 research centers, and 10 industrial partners with primary focus on joint higher education programmes in interdisciplinary mathematics.

The aim is to train the future generation of applied mathematicians at the intersection with industrial engineering, bio-medical sciences, economics, and social sciences.

**The EPICO project  
Erasmus Mundus Joint Master Degree on Electric Vehicle Propulsion and Control**

It is a 2-year Master programme that offers useful and necessary multidisciplinary topics in the e-mobility field. E-PiCo will provide technical and scientific solutions to the issue of fossil consumption and greenhouse gas emission. It is devised to train students in the field of e-mobility in order to have them work towards ecological transition.

It is directly applicable to industry by training future electric propulsion system expert graduates. Through

**TEACHING**

**259** Course Units  
**1** Post-graduate vocational, specialization and LLL courses

**RESEARCH**

**283** Publications  
**11** Projects  
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**THIRD MISSION AND SOCIAL ENGAGEMENT**

**12** Projects

**INSTITUTION**

**1** Infrastructures  
**2** Policies  
**4** Plans

lectures by reputable researchers, practical work on the latest experimental platforms, sessions with industrial specialists, annual workshops, E-PiCo students acquire the most advanced knowledge that will prepare them for the upcoming challenges in e-mobility.

**The EDISS project****Erasmus Mundus Joint Master Degree Programme on the Engineering of Data-intensive Intelligent Software Systems**

EDISS intends to bring together software engineering educators working in data collection, data-driven assessment, and decision-making for both design- and runtime and software engineers, architects and data scientists working on data pipelines, data architectures, DataOps and in experimentation systems. Such synergy will lead to sharing knowledge and expertise, and thus create new ideas and impactful solutions.

EDISS will educate experts who can masterfully integrate data science and ML solutions into software and system engineering processes.

**The Se4GD project****Erasmus Mundus Joint Master Degree Programme on Software Engineers For Green Deal**

The truly sustainable future requires that we understand the challenges from local to global level, from farms to industries, from companies to individuals, and are able to innovate, design and implement solutions that enable green and inclusive transition while making sure that no one is left behind.

The Se4GD Programme educates experts to innovate, design and implement software-based solutions with sustainable effect in mind for local and global sustainability challenges. The graduates will have an impact on individuals, societies, industries and governments through new responsible ways of developing systems.

**RUS - The Network of Universities for Sustainable Development**

RUS is a network of Italian universities that cooperate with the aim of pursuing and promoting sustainable development, with the two main

branches of environmental sustainability and social responsibility.

The main purpose is the dissemination of the culture and best practices of sustainability, both within and outside the universities (at the urban, regional, national and international levels), with a view to increasing the positive impacts of the actions of Network members in environmental, ethical, social and economic terms.

University of L'Aquila joined the network aware of the key role that universities play in the training of future generations and in the dissemination of knowledge within society, to promote a real behavioural change.

**ASviS - Italian Alliance for Sustainable Development**

ASviS has the aim to increase the process of transition to a sustainable society. More than 300 institutions are now members of the Alliance and work to achieve this goal through:

- Development of the culture of the sustainability at all levels,
- Analysis of the implications and opportunities for Italy by addressing the SDGs
- Contribution to the definition of an Italian Strategy

**Festival dello Sviluppo Sostenibile (Sustainable Development Festival)**

The events are organized every year, as contribution to the European Sustainable Development Week.

University of L'Aquila has been taking part in this event organised by the ASviS - Associazione Italiana per lo Sviluppo Sostenibile, since the first edition. During the Festival, the University organises a rich programme of events which are open and freely accessible to the general public.

**RUniPace - Network of Italian Universities for Peace**

The Network has been promoted by the Italian Conference of Rector (CRUI). Members of the network, are the Universities that inspire their actions on the fundamental principles of the Italian Constitution, of the UN Chart, of the UE treaties, of European Council Declaration on the repudiation of war as an instrument of offence against the freedom of other peoples and as a means of resolving international disputes.

University of L'Aquila is member of RUniPace.

**17** PARTNERSHIPS  
FOR THE GOALS



## TEACHING

**259** Course Units  
**1** International  
Master degree in  
Atmospheric Science and  
Technology

**1** Post-graduate  
vocational, specialization  
and LLL courses

## RESEARCH

**283** Publications

**11** Projects  
**9** Research Contracts

## THIRD MISSION AND SOCIAL ENGAGEMENT

**12** Projects

## INSTITUTION

**1** Infrastructures  
**2** Policies  
**4** Plans

## TEACHING

- **1** International Master degree in **Atmospheric Science and Technology**
- **259** Course Units
- **1** Post-graduate vocational, specialization and LLL courses
  - MAPROSS - Master in Progettazione Sistemica della Sostenibilità

## RESEARCH

- **283** Publications
- **11** Projects
- The Inter-university PhD Course in Sustainable Development and Climate Change

## THIRD MISSION AND SOCIAL ENGAGEMENT

- **12** Projects

## INSTITUTION

Infrastructures, Plans, Policies, Regulations:

- Strategic Plan
- Erasmus Charter for Higher Education 2021/2027
- Erasmus Policy Statement 2021-2027
- Gender Equality Plan - GEP
- Positive Actions Plan - PAP
- Positive Actions Plan - PAP (updated)
- Referent for the Network of Italian Universities for the Peace
- Festival dello sviluppo sostenibile (2020 and 2021)

Partnerships:

- RUS
- RUniPace