

Outline

1. GRIAL
2. UNINORTE
3. Northern Regional College
4. Politecnico di Torino
5. Technological University Dublin
6. University of OULU
7. UTN
8. UTPL
9. UCR
10. Universidad de Guadalajara
11. Tecnológico de Monterrey
12. Universidad Tecnológica de Bolívar

1. GRIAL

GRIAL

Research Group
University of Salamanca

Who we are

- GRIAL is an interdisciplinary group composed by permanent members from different areas of knowledge, such as software engineering, computer science, education, information science, social sciences, etc.
- GRIAL is a recognised (official) Research Group in the University of Salamanca since 2006
- GRIAL was recognised as Excellence Research Group of the Castilla y Leon regional government since 2007 to 2016 (GR47)
- GRIAL is currently recognised as Consolidated Research Unit of the Castilla y Leon regional government since 2015 (UIC 081)

Research lines

- Digital humanities
- eLearning methodologies
- Gender and STEM issues
- Health education
- ICT and educational innovation
- Information science
- Interactive learning systems
- Learning Technologies
- Quality and assessment in education
- Social responsibility and inclusion
- Strategic management of knowledge and technology
- Technological ecosystems
- Visual analytics
- Web engineering and software architecture

W-STEM related projects



<http://www.taccle3.eu/>

LABORATORIO BINACIONAL
PARA LA GESTIÓN INTELIGENTE DE
LA SUSTENTABILIDAD ENERGÉTICA Y
LA FORMACIÓN TECNOLÓGICA

Innovación abierta,
interdisciplinaria y
colaborativa para formar en
sustentabilidad energética a
través de MOOC

<http://energialab.com/>



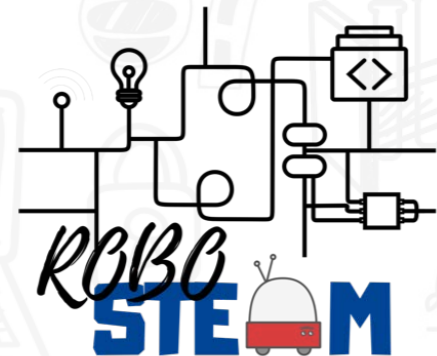
Virtual Alliances for Learning Society

<http://virtualalliances.eu/>



netWorked Youth
Research for
Empowerment in the
Digital society

<https://wyredproject.eu/>



<http://robosteampoint.eu/>



GRIAL team in W-STEM



Francisco José García-Peñalvo



Alicia García-Holgado



Juan José Mena



Valentina Zangrando

2. UNINORTE



College of Engineering

Dean



Javier Páez Saavedra
MBA
Universidad del Norte

**Academic
Director**



Amparo Camacho Díaz
MSc in Computer Science
Universidad de Cantabria

**Research and
Graduate
Programs Director**



Julián Arellana Ochoa
Ph.D. in Engineering
Pontifica Universidad Católica de Chile



**Chair
Department of
Civil and
Environmental
Engineering**

Luis Fuentes Pumarejo
Ph.D en Civil Engineering
University of South Florida



**Chair
Department of
Computer
Science**

Elías Niño Ruiz
Ph.D in Computer Science
and applications
Virginia Tech



**Chair
Department of
Electrical and
Electronic
Engineering**

Mauricio Pardo Gonzalez
Ph.D in Electrical and
Electronics Engineering
Georgia Tech



**Chair
Department of
Industrial
Engineering**

Lina Prada Angarita
MSc in Industrial Engineering
Universidad del Norte

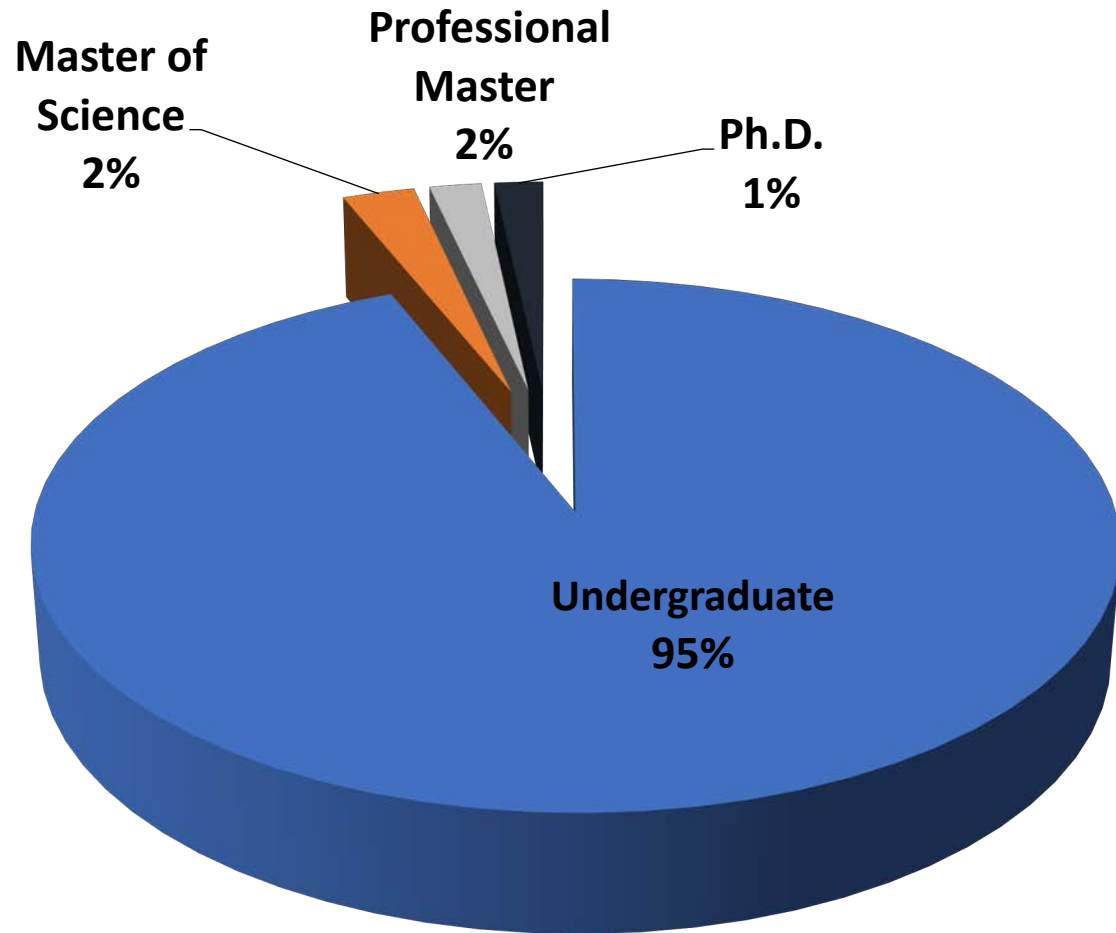


**Chair
Department of
Mechanical
Engineering**

Habib Zambrano Rodriguez
Ph.D in Mechanical
Norwegian University of
Science and Technology



Total Enrolled Students College of Engineering



4518 students

30% of Uninorte's enrolled students

Undergraduate Programs

College of Engineering



Civil Engineering

1.173 Students



Systems Engineering

532 Students



Electrical Engineering

277 Students



Electronics Engineering

376 Students



Industrial Engineering

1.164 Students



Mechanical Engineering

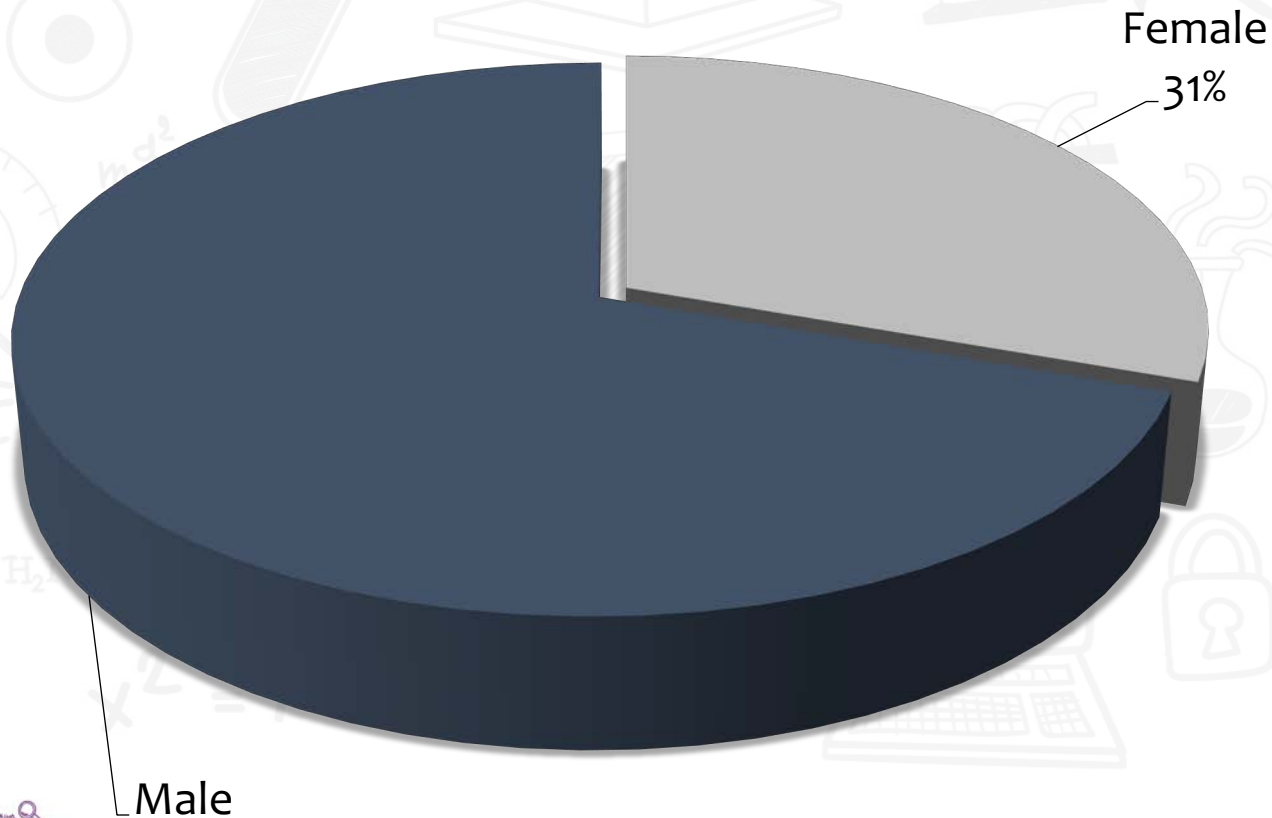
784 Students

Undergraduate Programs

Gender distribution

Total Enrolled Students

College of Engineering

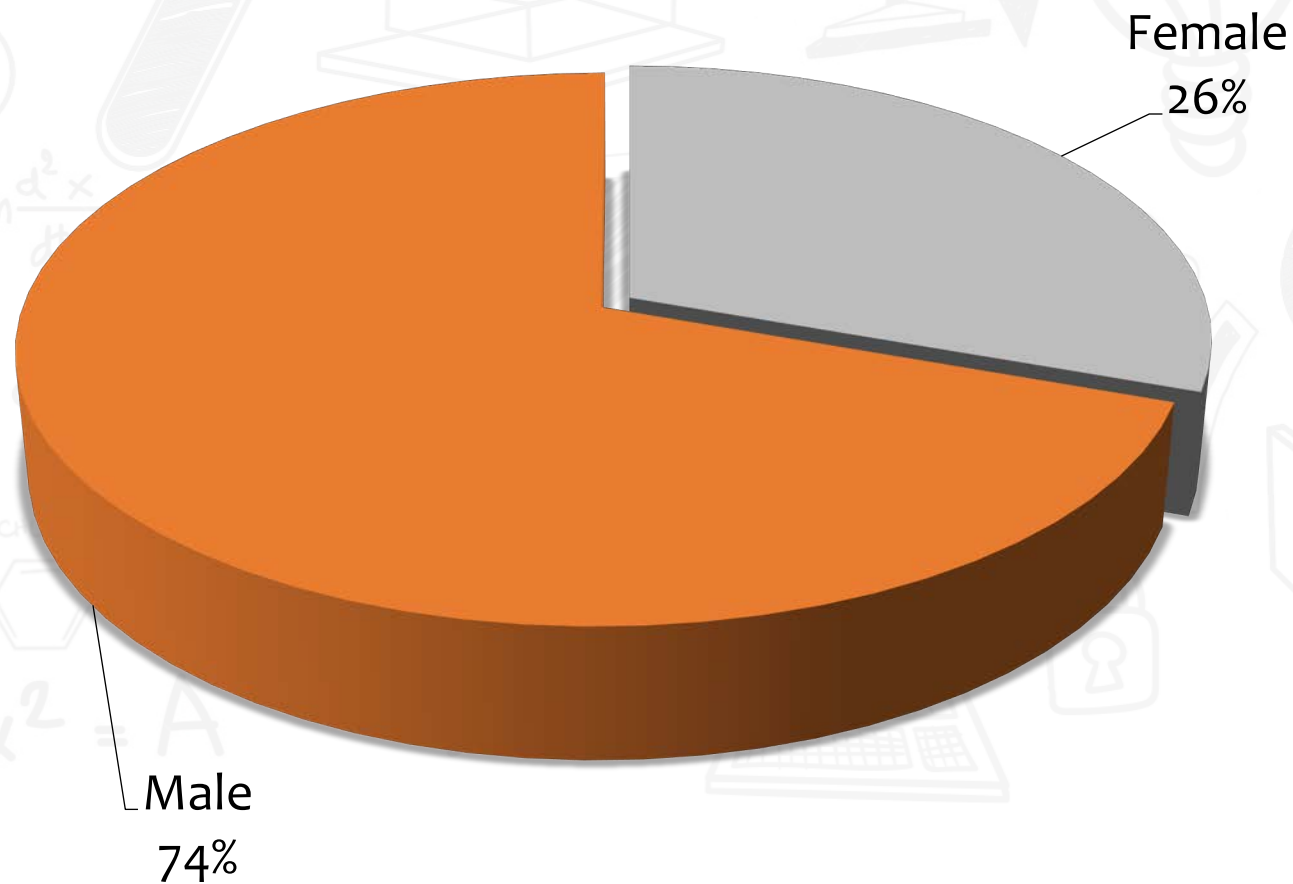


Graduate Programs

Gender distribution

Total Enrolled Students

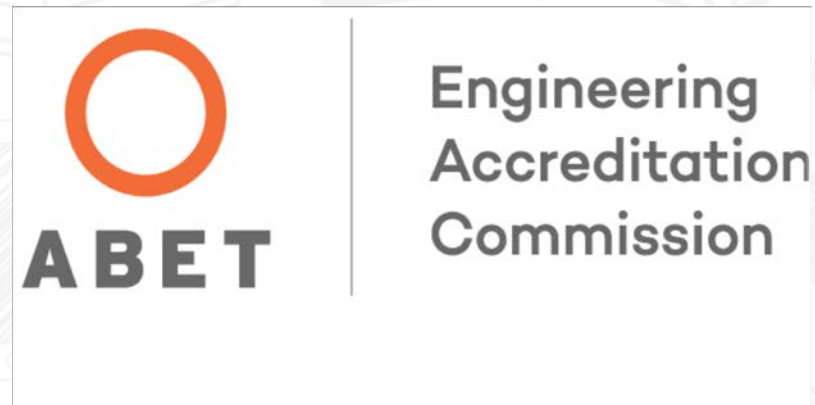
College of Engineering



International Undergraduate Programs



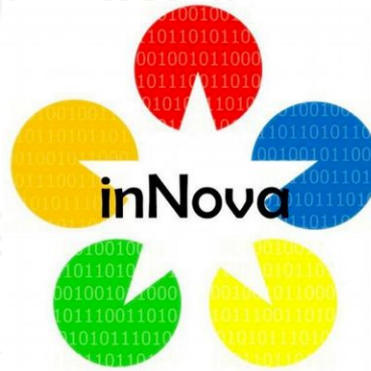
2010



2016

***First HEI in Colombia
to be accredited***

Student Groups



Student Groups



IEEE



**Association for
Computing Machinery**



IISE

INSTITUTE OF INDUSTRIAL & SYSTEMS ENGINEERS

ASCE

AMERICAN SOCIETY OF CIVIL ENGINEERS



Research Groups



COLCIENCIAS
Ciencia, Tecnología e Innovación

A1 (6) A (5)

Civil Engineering

- Transport - TRANVIA (A1)
- Institute of Hydraulics and Environmental Studies- IDEHA (A1)
- Structure and Geotechnics- GIEG (A)

Systems Engineering

- Computer Networks and Engineering Software - GReCIS (A1)

Electrical and Electronic Engineering

- Robotics and Intelligent Systems- GIRSI (A)
- Telecommunications and Signals (A)
- Bioengineering- BIOUSING (A)
- Electrical Power Systems- GISEL (A)

Industrial Engineering

- Productivity and Competitiveness (A1)
- Transport - TRANVIA (A1)

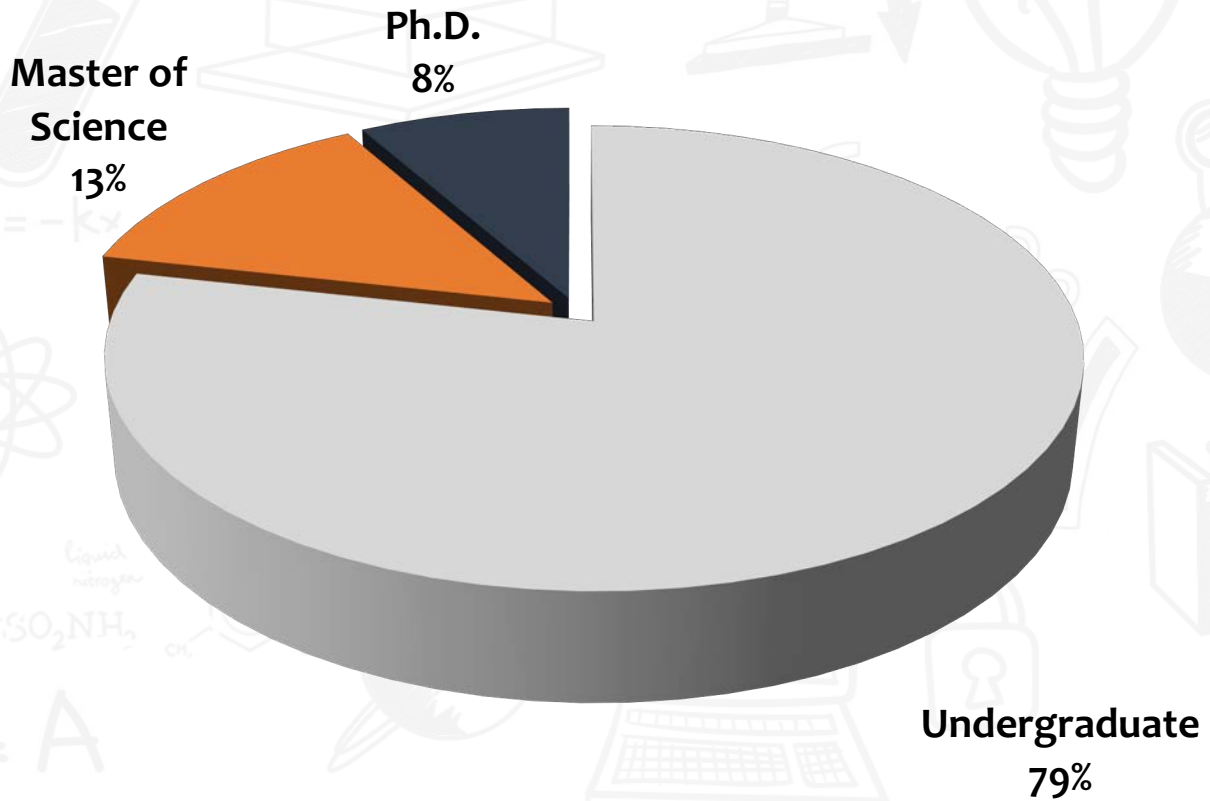
Mechanical Engineering

- Materials, Processes and Design (A1)
- Reasonable Energy Use and Environment Preservation - UREMA (A1)

College of Basic Sciences

Total Enrolled Students

College of Basic Sciences

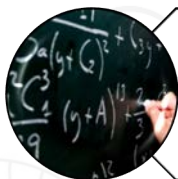


316 students



Undergraduate gender distribution

Total Enrolled Students



Mathematics

54 Students

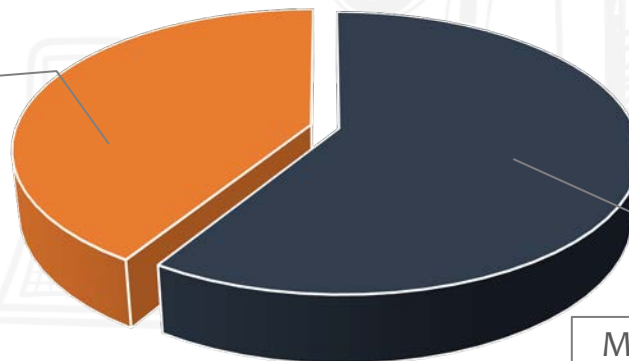


Geology

194 Students

248 students

Female
41%



Male
59%

Partners and Alliances

Partners in USA and Europe



TEXAS TECH
UNIVERSITY.



ARTS
ET MÉTIERS
ParisTech



New Alliances In Process

NC STATE UNIVERSITY

THE UNIVERSITY OF
ALABAMA

UNIVERSITY of WISCONSIN

UWMILWAUKEE



UNIVERSITY OF
SOUTH CAROLINA

W-STEM PROJECT



Uninorte Team in W-STEM project

	Title	First Name	Last Name	Position in the organization	Department	Staff Category
1	MSc	Amparo	Camacho Díaz	Academic Director Eng College	Systems Eng Department	Manager
2	PhD	Rita	Peñabaena Niebles	Full Professor	Industrial Eng Department	Researcher
3	PhD	Lucy	García Ramos	Full Professor	Systems Eng Department	Researcher
4	MSc	Jose	Soto	Full Professor	Electrical Eng Department	Researcher
5	Phd	Victor	Cantillo	Full Professor	Civil Eng Department	Researcher

Work packages lead by Uninorte

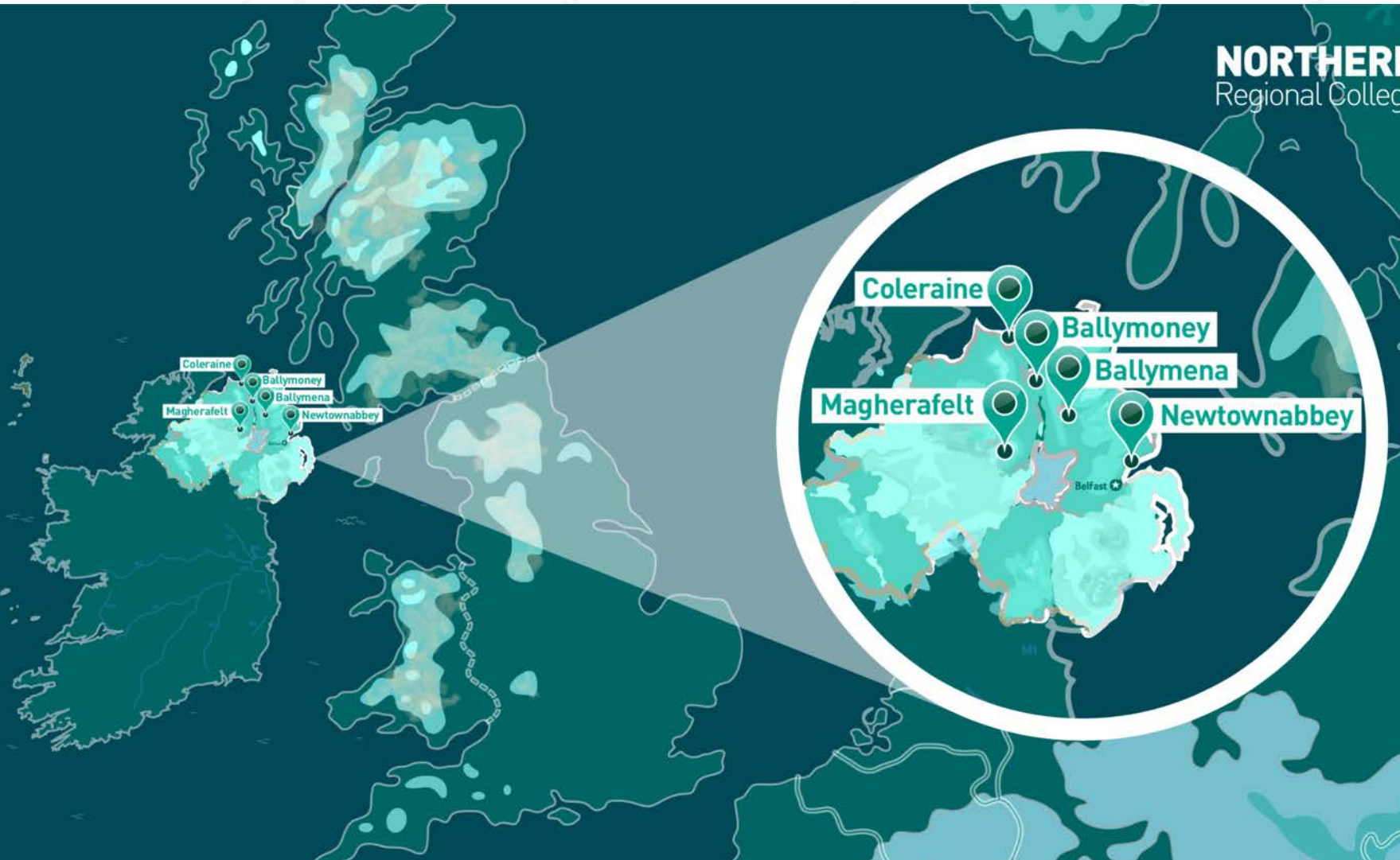
WP		TASK		MONTH	ROLE
2.2	DEVELOPMENT	A.2.2.1	International Leadership Summer-Camp	M11-M13	Lead organization
	Universities policies and organizational mechanisms		Conference on the global and regional outlook on gender equality at STEM education and women in science participation, with special support of UNESCO. It will be the opportunity to share the results of the self-evaluation reports, to explore good practices and benchmarking activities.		
2.4	DEVELOPMENT	A.2.4.2	Selecting prospective female students	M16-M21	Lead organization
	Attraction Campaigns with Secondary Schools		Implement attraction campaigns at local level by each participant HEIs to stimulate interest and foster in-depth knowledge about STEM career issues in the selected groups of girls.		
5	MANAGEMENT	A.5.2	Project meeting #1	M11	Host institution
			This is the first project meeting that will be held in Barranquilla - Cartagena (Colombia). The aim of this task is to follow up project activities.		
5	MANAGEMENT	A.5.5	Daily management and periodical videoconferences	M1-M36	Lead organization

NORTHERN
Regional College



3. Northern Regional College





- Community Centres
- Campuses
- Post-primary Schools



6
Campuses

32
Centres for
community
based provision

47
Post-primary
school partnerships





Engineering &
Built Environment



Care & Access



Computing, Business
& Creative Industries



Science & Service
Industries

Northern Regional College in Numbers



- 10,000 students
- 16,000 enrolments
- 1,100 Higher Education students (300 full-time)
- 1,100 apprentices
- £30m annual budget
- 4 Council areas
- Working with 780 SMEs
- £84m capital investment programme
- 800 staff

Where Colleges Fit in the Education System



14-16 year olds – Entitlement Framework curriculum delivery in partnership with schools

16-18 year olds – Level 1 to 3 Further Education work-based learning - training and apprenticeships

Higher Education – Level 4 Higher Diploma, Level 5 Foundation Degree, Higher Level Apprenticeship, Degree

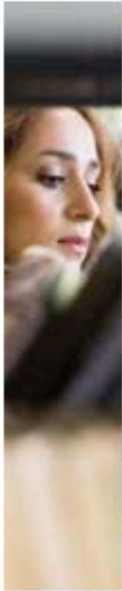
4. Politecnico di Torino



**POLITECNICO
DI TORINO**



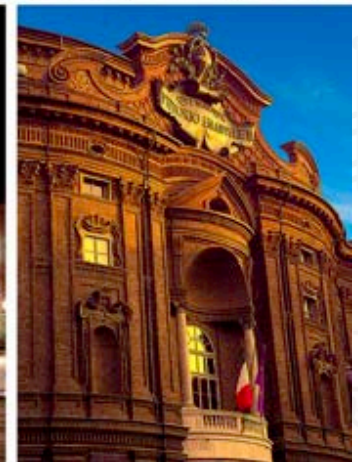
$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



Politecnico di Torino at a glance



The city of Torino



Our history in few steps

Technical School
for Engineers



1859

Italian Industry
Museum



1862

Corso Duca degli
Abruzzi:



1958

150 years of
“Polytechnic culture”



2009

1861



Unification of Italy

1906



Regio
Politecnico di Torino

1991

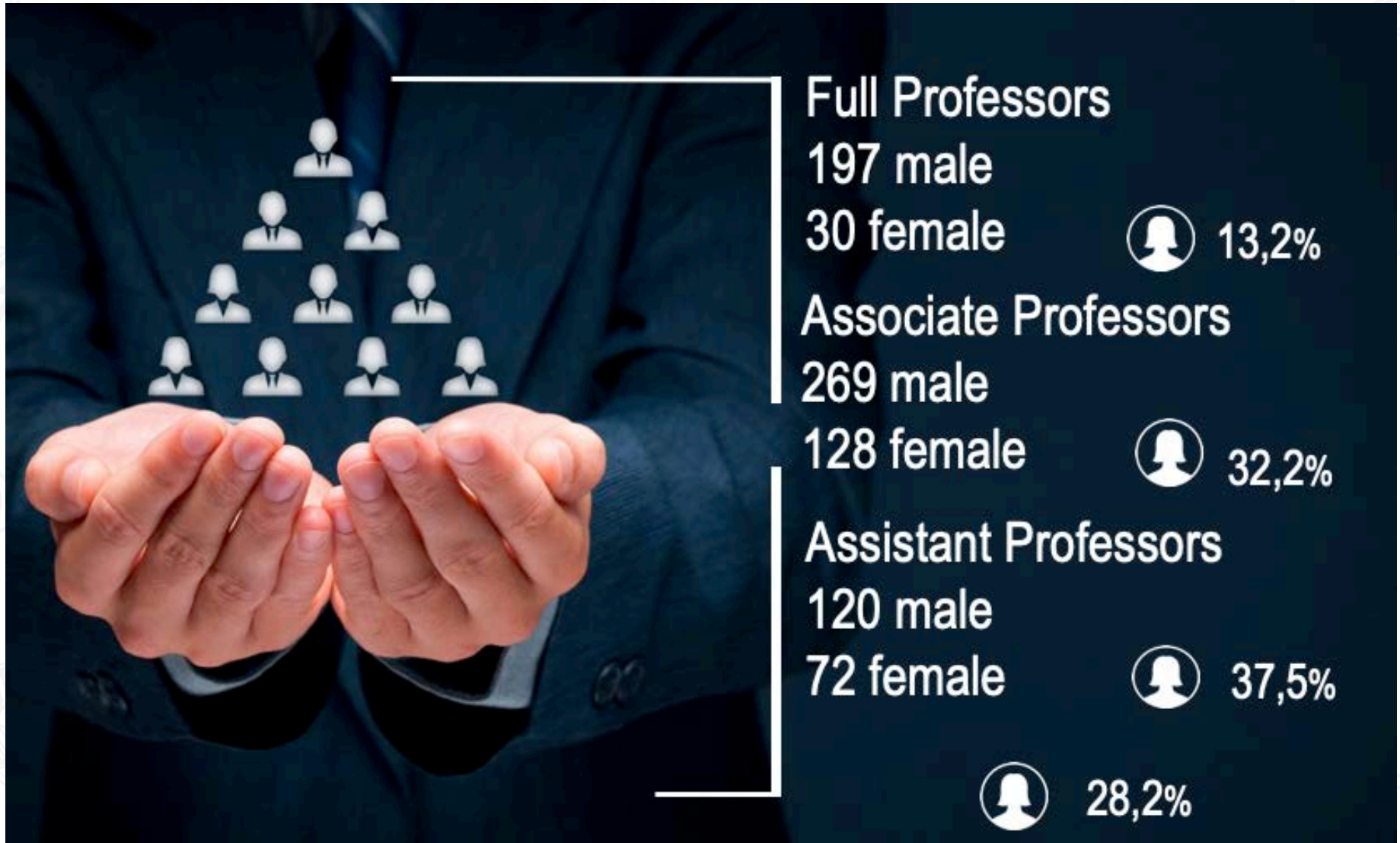


Cittadella Politecnica
Campus: site
construction
opening

Today



Faculty



Education

a.y. 2018/19

35.500

Students

5.089 First year BS students

16% International students

68% Students from outside Piedmont



28,6%



Programs

a.y. 2018/19

Degree Programs

BS degree		MS degree	
22	COURSES	29	COURSES

3 architecture
19 engineering

6 architecture
23 engineering

5 taught
in English

15 taught
in English

PhD programs

3 years		
16	COURSES	

Specializing Masters

I level	II level
4 COURSE	14 COURSES

Additional educational programs
for talented students

Qualità & Impegno

BS degree

Alta Scuola Politecnica

MS degree



5. Technological University Dublin

$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$

Dublin, Ireland

- Dublin is one of the world's major Information and Communications Technology (ICT) hubs
- Ireland is the second largest exporter of computer and IT services in the world. Many major multi-nationals in the ICT sector have their European Headquarters in Dublin (Intel, Google, Facebook)
- Ireland is the European data centre location of choice for world leaders including IBM, Microsoft, Google, Yahoo, MSN and Adobe and is now poised to become a global cloud centre of excellence
- Ireland is a globally recognised centre of excellence in the lifesciences industry, employing over 50,000 people directly and exporting over €45 billion of pharmaceuticals annually. This makes Ireland the largest net exporter of pharmaceuticals in the world
- Ireland is the largest net exporter of dairy ingredients, beef and lamb in Europe, the largest exporter in Europe of powdered infant formula and the UK's largest supplier of food and drink



Technological University Dublin

- Ireland's eighth University, formed in 2019 through the coming together of Dublin Institute of Technology (dating to 1887) and two smaller Institutes of Technology in the Dublin area
- 28,500 students, 3,000 staff –the largest University in Ireland
- Moving to new campus in 2020



College of Sciences and Health

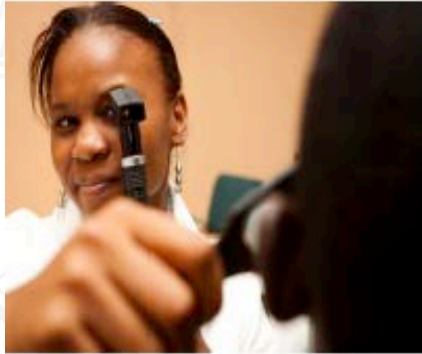
Mission

Support economic and societal development by providing highly skilled graduates, trained researchers and an up-skilled workforce capable of anticipating and meeting demand in competitive global sectors including Food, Pharmaceutical and Life Sciences, ICT, Green Technology, Financial Services, Education and the Allied Health Professions

- Students: 50% male, 50% female
 - Biological Sciences, Health Sciences: > 80% female
- Computer Science, Physics, Mathematics: > 80% male
 - Proactive strategic approach to addressing diversity challenges through College planning and engagement processes

Infinite Possibilities

$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



Introductions

Ciarán O'Leary

- Head of Learning Development, College of Sciences and Health
- Computer Science background
- Research Interest in Universal Design, Accessible Computing
- Chair of Widening Participation Committee for Dublin Institute of Technology, until 2018
- Chair of College's Recruitment Committee for 10 years

Liz Heffernan

- College Manager, College of Sciences and Health
- Human Resources and Finance background
- Senior Administrator with responsibility for administration of the College
- Founding Member of Women Leaders in Higher Education Steering Group
- Chair of College Resources and Facilities Committee

6. University of OULU

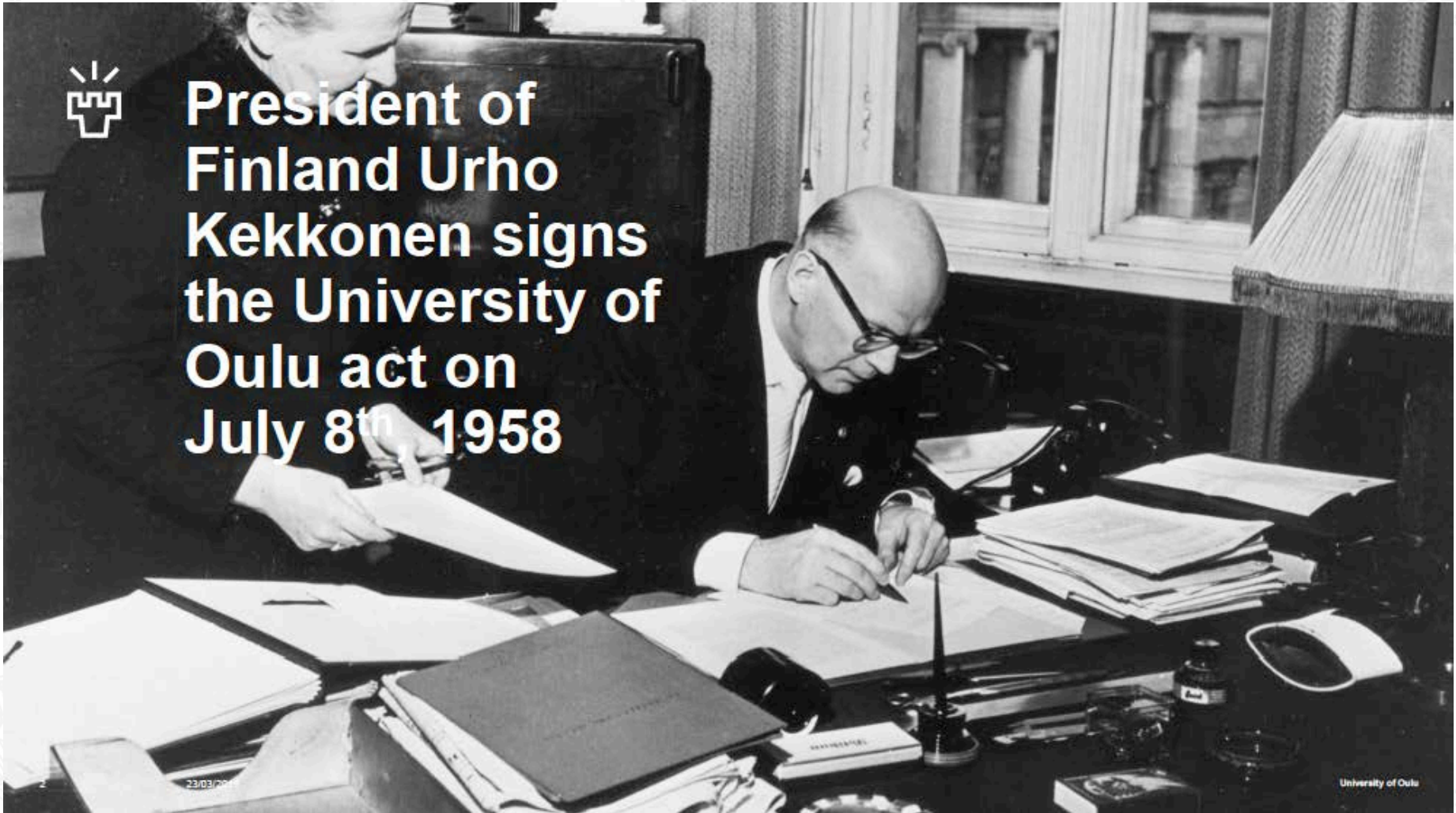


$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$

www



President of Finland Urho Kekkonen signs the University of Oulu act on July 8th, 1958



$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



THE NEXT
FOR
THE
GENERATION
NOI



THE NEXT
FOR
THE

GENERATION
NOI





#unioulu #arcticattitude



University of Oulu founded

1958

Multidisciplinary research and education

Natural Sciences and Mathematics



Biosciences



Medicine and Health



Economics and Business Administration



Engineering and Architecture



Information and Communication Technologies



Education



Humanities



50 000+

Alumni

13 000

Students

2 900

Staff





Key figures

International rankings

251– 600

top 3%

of the world's universities

Funding total in 2017 M€

226

Research based spin-off companies since 2000

67

Invention disclosures in 2018

35

2 532

Scientific publications in 2018

Bachelor's degrees in 2018

1181

Master's degrees in 2018

1315

Doctor's degrees in 2018

199

2 695

Degrees in 2018

$$(\ln x)' = \frac{1}{x} \quad \int \frac{1}{x} dx = \ln|x| + C$$



Campuses



$$x^2 = A$$

$$\frac{dT}{dt} = (C_1)$$



$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



● University of Oulu

Linnanmaa campus, Oulu

Kontinkangas campus, Oulu

Sodankylä Geophysical Observatory

Oulanka Research Station, Kuusamo

Kajaani University Consortium

Kokkola University Consortium

Kerttu Saalasti Institute, Nivala

● Summer University of Northern Ostrobothnia

Oulu, Kuusamo, Pyhäjärvi, Raahel, Ylivieska

$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



Linnanmaa Campus - City of science and innovation

VTT Technical Research
Centre of Finland
Technopolis
Finnish Food Safety
Authority (Evira)

Natural Resources
Institute Finland (LUKE)
Finnish Environment
Institute (SYKE)

6 Faculties under the same roof
4 Focus Institutes, Thule Institute
Tellus Innovation Arena

Botanical Gardens

Teacher Training
School

Oulu University of Applied
Sciences will move into the
same campus in 2020

Student housing

University leadership
and services

Student housing

Student housing

Sports hall
Ice skating rink



$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



Kontinkangas Life Science Campus

Technopolis (Medipolis)
company facilitator

Oulu University of Applied
Sciences, Health education

Oulu City Hospital

Student housing

ICT, health and bio
companies

University Hospital
Medical Research Center

2 Faculties, Biocenter Oulu

Dentopolis

Finnish Institute of Occupational Health (TTL)
National Institute for Health and Welfare (THL)





$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



Faculty of Education





#unioulu #arcticattitude



University of Oulu founded

1958

Multidisciplinary research and education

Natural
Sciences and
Mathematics



Biosciences



Medicine
and Health



Economics
and Business
Administration



Engineering
and
Architecture



Information and
Communication
Technologies



Faculty of
Education

Humanities



1 629

Students

Present in Spring term 2018

243 Bachelor
200 Master and
7 Doctoral degrees
in 2017

150

Staff



Faculty of Education

Kasvatustieteiden tiedekunta

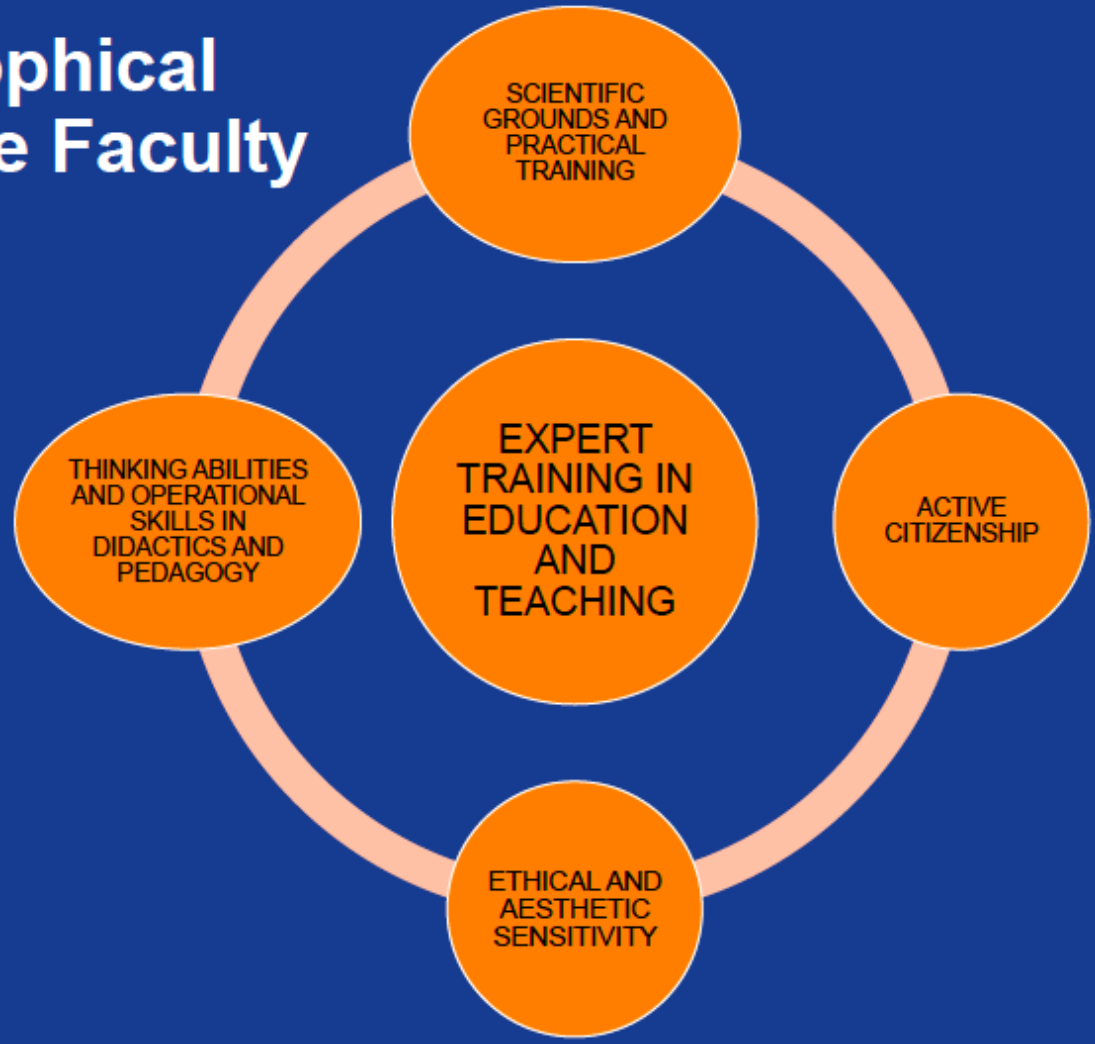


<http://www oulu.fi/ktk/node/974>

- Provides Bachelor, Master and Doctoral degrees
- Center of Excellence in Higher Education Awards in 1997-1999 and 2010-2012
- High quality teaching and research environment and infrastructure
- Education export to e.g. Armenia, Namibia, Thailand, China
- Oulun Normaalikoulu, Oulu's Teacher Training School is an important partner and a part of the faculty



The Philosophical Pillars of the Faculty



$$(\ln x)' = \frac{1}{x} \quad \int \frac{1}{x} dx = \ln|x| + C$$



Principles of Teacher Education



- A good education system demands high quality teacher education (about 11% applicants accepted)
- Research-based programmes and courses
- Close connection to practice via University Teacher Training School
- Life-long learning: from pre-service to in-service education

$$x^2 = A$$



$$\frac{dT}{dt} = (C_1)$$



Degree Programmes



Bachelor and master degree programmes:

Educational Sciences

Early Childhood Education

Primary Teacher Education

Intercultural Teacher Education

Music Teacher Education

Special Teacher Education

International master programmes – Note! **Apply before 23 of January, 2019:**

Education and Globalization, (EdGlo), MA

Learning, Education and Technology, (LET) MA

Subject teacher programme:

Pedagogical Studies for Subject Teachers



Degree programmes & annual intake

Primary Teacher Education Programs, B.A. (Ed.) + M.A. (Ed.):

Annual Intake:

- Primary Teacher Education, no emphasis 80
 - Also separate MA enrollment 20
- Technologically-oriented Primary Teacher Education 20
- Primary Teacher Education with Emphasis in Arts Education 20
- Primary Teacher Education with Emphasis in Special Education 20
 - Also separate in-service MA 30
- Intercultural Teacher Education 20

Other Programs , B.A. (Ed.) + M.A. (Ed.):

- Early Education 90
- Music Education 20
- Educational Sciences 20
 - Also separate MA enrollment 15

Master's Programs, M.A. (Ed.):

- Education and Globalization 20
- Learning, Education and Technology 20
- Pedagogical Studies for Secondary Teachers 160



About 330 students starting each year





Minor Subjects

25 ECTS

- Education for Intercultural Competencies
- Education in Transition Special Education
- Basic Studies in Educational Technology
- Art
- Handicrafts/Technical Work/Technology
- Handicrafts/Textile Work/Technology
- Physical Education
- Multiculturalism
- Music
- Pre-school and Primary Education
- Cultural Environments of Early Childhood

35 ECTS

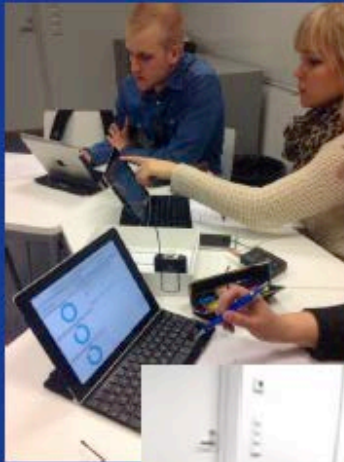
- Intermediate Studies in Education

25-60 ECTS

- Education Sciences
- Women's and Gender Studies
- Psychology
- Sociology
- Health Education



The Faculty's Research Profile



Challenges of Education in a Diversifying and Digitalized World

Three Research Units

1. **Learning and Learning Processes**
(*Oppiminen ja oppimisprosessit*)
2. **Teachers, Teaching and Educational Communities**
(*Opettajat, opettaminen ja kasvatusyhteisöt*)
3. **Values, Ideologies and Social Contexts of Education**
(*Kasvatuksen arvot, aatteet ja yhteiskunnalliset kontekstit*)

$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + C$$



Alumni



University of Oulu





Over 50 000 alumni



Martti Ahtisaari

Rauhanneuvottelija
YK-diplomaatti
Nobel-palkinnon saaja 2008
Suomen presidentti 1994–2000
Kunniajohtori 1980
Valmistunut 1959



Leena Peltonen-Palotie

–2010
2009 tieteen akateemikko
UCLA Department of Human
Geneticsin perustaja
LT 1976, FT 1978



Paula Vanninen

Johtaja, Kemiallisen aseiden
kieltosopimuksen instituutti Verifin
DI 1984, FT 1992



Jarkko Oikarinen (WiZ)

Technical Lead Manager, Google
Ensimmäisen internetin
keskusteluverkon, Internet Relay
Chat (IRC), kehittäjä
DI 1992, FT 1999



Baylie Damtie

Rehtori, Bahir Darin yliopisto,
Etiopia
Akateeminen vararehtori (Provost),
Bahir Darin yliopisto
FT, fysiikka 2004

Primary school teacher
Nobel prize 2008



Jussi Pesonen

Toimitusjohtaja, UPM
DI



Kaisa Hietala

Liiketoiminta-alueen johtaja,
uusitutuvat tuotteet, Neste
Varatoimitusjohtaja,
matkustajaliikenne, VR-Group
DI 1995



Anssi Lassila

OOPEAA Office for Peripheral
Architecture
Arkkitehtuurin Finlandia-palkinto
2015 Puukuokka-
asuinkerrostalosta
American Architecture Prize 2016 -
palkinnon voittaja
Arkkitehti 2002



Anne Stenros

Helsingin muotoilujohtaja (Chief
Design Officer)
Muotoilujohtaja, Kone Corporation
Arkkitehti 1981



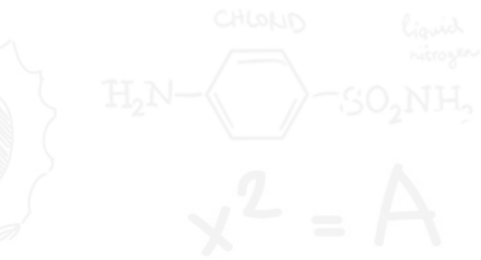
Sakari Orava

Urheilulääketieteen kirurgi, lääkäri,
ortopedi ja professori
Asiakkaita muun muassa Real Madrid,
FC Barcelona, Chelsea FC ja
Juventus.
LT 1972, FT 1980

Oulun yliopisto



7.UTN





Galápagos



Amazonía



Costa del Pacífico



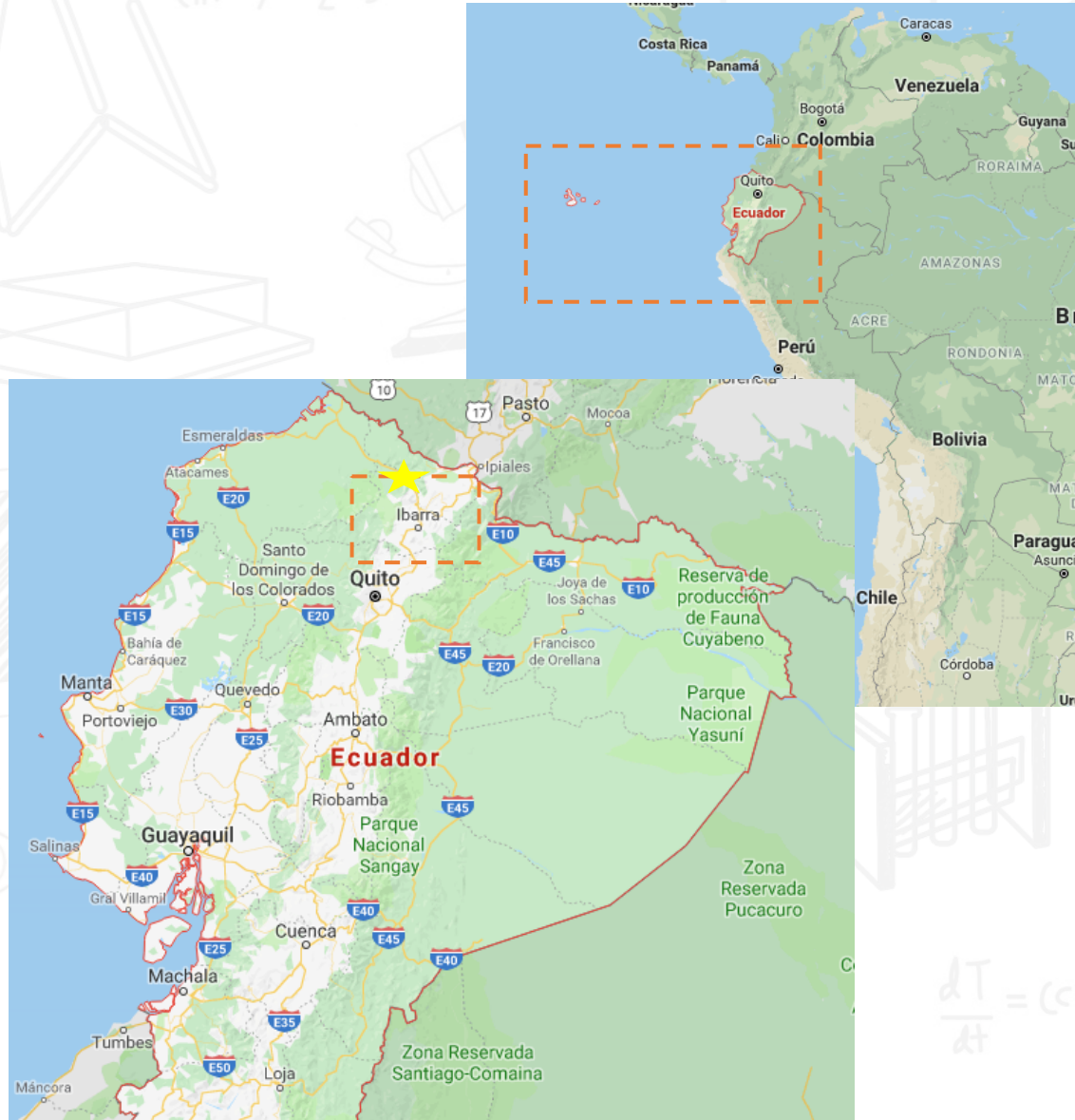
Andes



Four worlds in one country. It's easy!

Location

Universidad Técnica del Norte is located in the city of Ibarra, Imbabura Province, in the Northern Ecuadorian Andean Region, at a distance of 145 km from Quito, capital of the Republic of Ecuador



General Information

Higher Education Public Institution.
Located in Ecuador, city of Ibarra.
Founded in 1986



W-STEM Partnership



Academic Catalog

FACULTY	PROGRAMS
AGRICULTURAL AND ENVIRONMENTAL SCIENCES	5
ENGINEERING IN APPLIED SCIENCE	7
HEALTH SCIENCES	4
ADMINISTRATIVE AND ECONOMIC SCIENCES	7
EDUCATION, SCIENCE, AND TECHNOLOGY	11

MASTER	PROGRAMS
Pedagogy, Early Childhood Education, Agribusiness Management, Laws, Telecommunications, Technology and Innovation, Tourism, Biodiversity and Genetic Resources, Physical Activity, Renewable Natural Resources, Pedagogy of National and Foreign Languages	12

Research fields

- Industrial Production and Sustainable Technology
- Sustainable agricultural and forestry development
- Biotechnology, energy and renewable natural resources
- Sustainable food safety
- Health
- Management and quality of education, pedagogical processes and languages
- Artistic development, design and advertising
- Social and human development
- Administration, production, productivity, innovation and socioeconomic development
- Software development and application and cyber security



Facilities

1. “El Olivo” Campus UTN
2. Yuyucocha
Experimental Farm
3. La Favorita
Experimental Station
4. La Pradera
Experimental Farm
5. El Cristal
Wildlife Reservation
6. Santa Mónica Farm
7. Old Ibarra Hospital
8. Textile Plant Azaya



Cultural Programs

- Folkloric Dances
- Latin American Mestizo Dances
- Ballet and Contemporary Dance
- Ballroom Dancing and Afro Dance
- Ethno Contemporary Dance
- Music - Wind and Andean Instruments
- Percussion Music
- Strings Music
- Choir and Chamber Group
- Theatre – Stilts
- Capoeira Laboratory
- Circus Arts



Sports



- Athletics
- Basketball
- Cycling
- Cheerleading
- Ecuavolley
- Soccer
- Gymnastics
- Swimming
- Rugby
- Taekwondo
- Triathlon



Science Clubs

- Robotics
- Programming
- Motoring
- IEEE Student Branch
- Entrepreneurship
- Electricity and Automation
- Ethical Hacking Computer Security UTN
- Ecological Club
- Biotechnology
- Climbing
- Public relations
- Psychology
- English
- Photography
- Technical aids for people with disabilities
- Marketing
- Microsoft UTN Students Cell



Project Members



Jorge Caraguay

Dean

Faculty of Engineering in Applied Science –
FICA



Catalina Ramírez

Vicedean - FICA



Luz María Tobar Subía

Full profesor – FICA

Mechatronics Engineering

Project Members



Winston Oviedo

- *Full profesor, FICA - Coordinador HUB NORTE*



Daisy Imbaquingo

- *Full profesor, FICA - Coordinador ACESI*



Carlos Vasquez

- *Full professor, FICA - Consellor IEEE UTN*



Project Members



Victoria Proaño

Coordinator Students Office

Engagement with the Community



Katharina Steinlechner

Coordinator

International Relations Office



$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$



Homepage: www.utn.edu.ec

 /utnuniversity  @utnuniversity

 canalutnuniversity

Phone: + 593 6 2 997800

Universidad Técnica del Norte

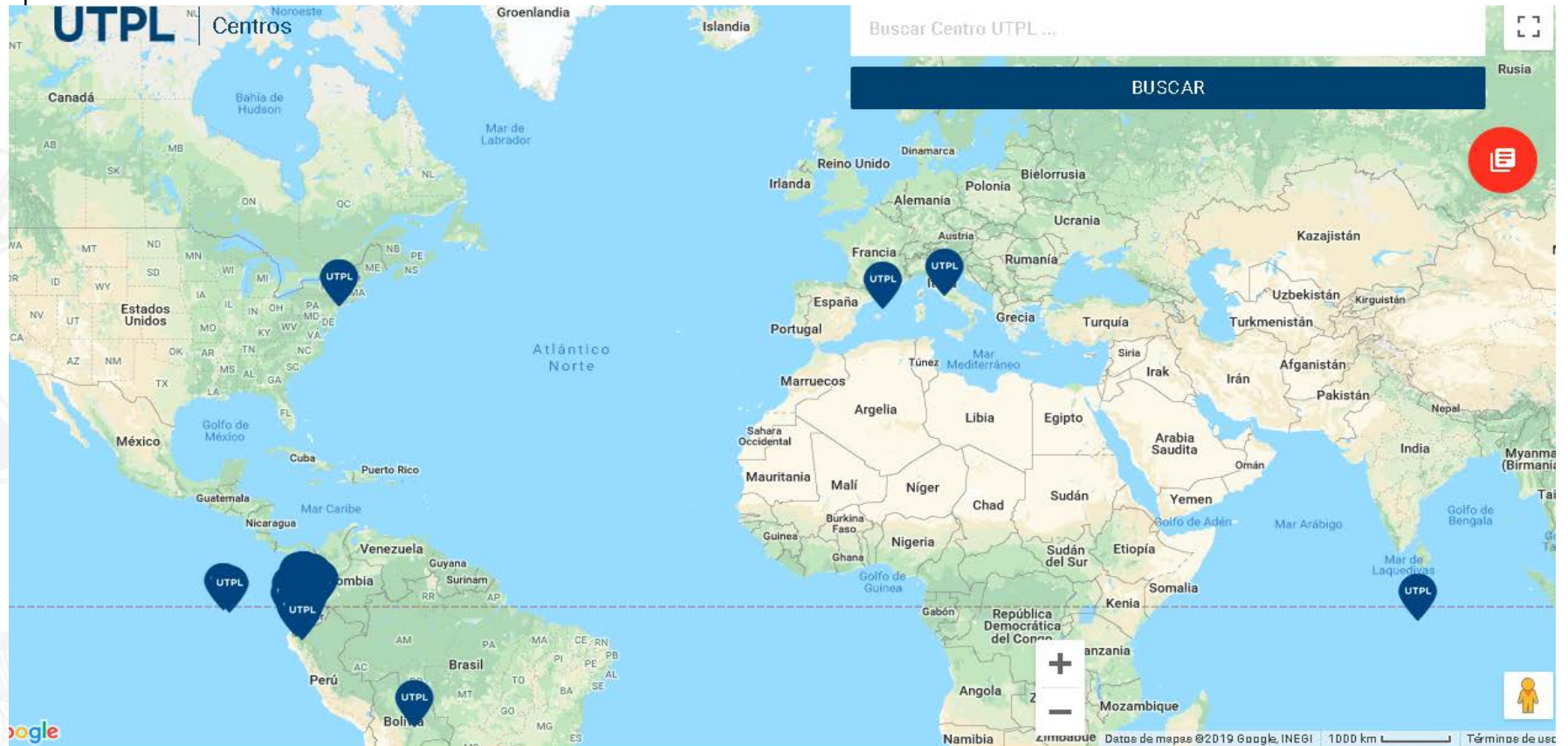
Ibarra - Ecuador



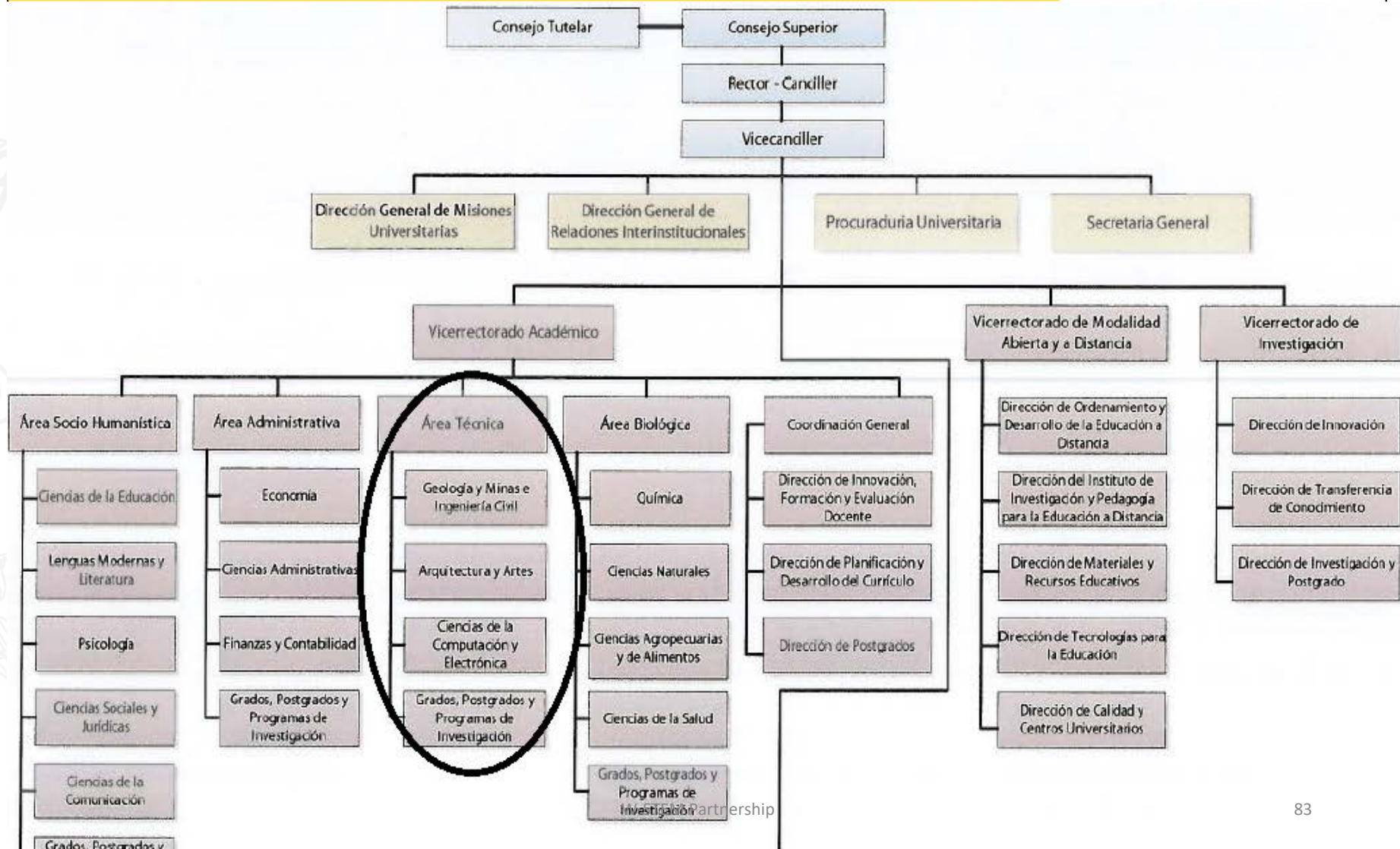
8. UTPL



UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA



UNIVERSIDAD TÉCNICA PARTICULAR DE LOJA



EQUIPO UTPL

- Jorge Luis Jaramillo (Director del Proyecto)
- Samanta Cueva (Investigador)
- Germania Rodríguez (Investigador)
- María Soledad Segarra (Investigador)
- Xavier Burneo (Investigador)
- María Dolores Mahuad (Investigador)
- Ana Bravo (Relaciones Interinstitucionales)



9. UCR





Participants in Kick-off meeting

M.Sc. Leonora de Lemos Medina, Director of International Affairs Office and Mechanical Engineering School professor and researcher.

Doctor of Education, Universidad La Salle, San José ,Costa Rica, in process.

Maestría en Ingeniería Mecánica. Énfasis en Modernización y Mantenimiento de Maquinaria, Universidad de Los Andes, Bogotá, Colombia.

Maestría Profesional en Ingeniería Mecánica. Énfasis en Sistemas térmicos y de Energía, Universidad de Costa Rica.

Bachelor degree in Mechanical Engineering, Universidad de Costa Rica.

Dr. Rosaura M. Romero Chacón, Chemistry School professor and Researcher at the Research Center for Natural Products

Doctor of Philosophy: University of London, England.

Master in Education Technology: Instituto Tecnológico de Monterrey, México.

Licentiate In Organic and Analytical Chemistry: University of Costa Rica, Costa Rica.

Bachelor in Chemistry: University of Costa Rica, Costa Rica.



We are a comprehensive university

7 Regional Campuses

Rodrigo Facio University City
Guanacaste Regional Campus
Regional Campus of the Pacific
Regional Campus of the West
Regional Campus of the Atlantic
Regional Campus of the Caribbean
Alajuela Interuniversity Branch

5 Branch Campuses

Santa Cruz, Guanacaste
Golfito, Puntarenas
Tacares, Alajuela
Paraíso, Cartago
Guápiles, Limón

$$(\ln x)' = \frac{1}{x} \int \frac{1}{x} dx = \ln|x| + c$$





$$(\ln x)' = \frac{1}{x} \quad \int \frac{1}{x} dx = \ln|x| + c$$



MORE THAN **40 000** STUDENTS ACROSS THE COUNTRY

MORE THAN **9 000** NEW STUDENTS EVERY YEAR

MORE THAN **21 000** STUDENTS ARE ON SOCIO-ECONOMIC ASSISTANCE SCHOLARSHIPS

MORE THAN **14 000** OF THESE STUDENTS ARE ON SCHOLARSHIP 5 REGIME



10. Universidad de Guadalajara



UNIVERSIDAD DE
GUADALAJARA
Red Universitaria de Jalisco



Universidad de Guadalajara (UdeG)

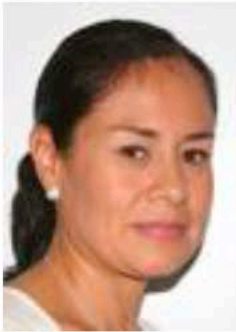
- It is an institution which attends around 160,000 students in its high school programs, and about 127,000 in its undergraduate and graduate academic programs in the Metropolitan Area of Guadalajara and eight regions of Jalisco
- UdeG is renowned as the second largest university in Mexico and as one of the most important state universities for the formation of high quality human resources and the production of scientific and technological knowledge
- Since 1994, it has been organized as a university network, currently consisting of 15 centres, a virtual university system and a high school system



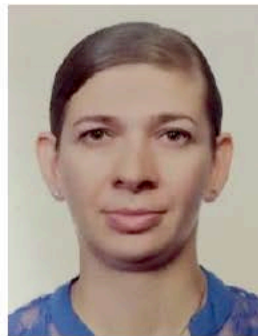
University Centre of Exact Sciences and Engineering

- We work at this centre, which
 - Offers 18 undergraduate and 20 graduate degree programs, and attends around 15,000 students
 - Has about 1,300 professors; about the 43% of which are full time professors
 - Is organized in 3 divisions: Basic Sciences, Engineering, and Electronics and Computer Sciences
- For more information, you can check the web page and YouTube videos in the following links
 - <http://www.udg.mx/>
 - <http://www.cucei.udg.mx/>
 - <https://www.youtube.com/watch?v=f44vN3TU9g8>
 - <https://www.youtube.com/watch?v=igbKZB4lrko>
 - <https://www.youtube.com/watch?v=4fYT9r8De50>

W-STEM team



**Dra. Verónica María
Rodríguez Betancourt**
Email:
veronica.rbetancourt
@academicos.udg.mx



**Mtra. Mónica Judith
Durón González**
E-mail:
monica.duron@academi
cos.udg.mx








**Dra. Lourdes Adriana
Pérez Carrillo**
E-mail:
lourdesapc31@hotmail.
com

11. Tecnológico de Monterrey



Tecnológico
de Monterrey

OUR VALUES

-  INNOVATION
-  GLOBAL VISION
-  TEAM WORK
-  HUMANISTIC OUTLOOK
-  INTEGRITY

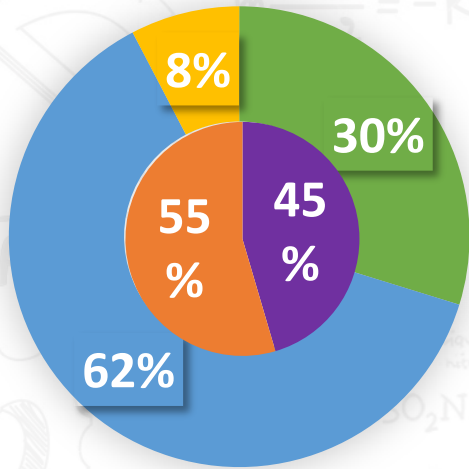
MEMBER OF:



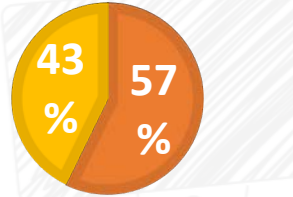


91,200 STUDENTS

32,390 PROFESSORS



■ High school ■ Undergraduate



■ Male ■ Female

18

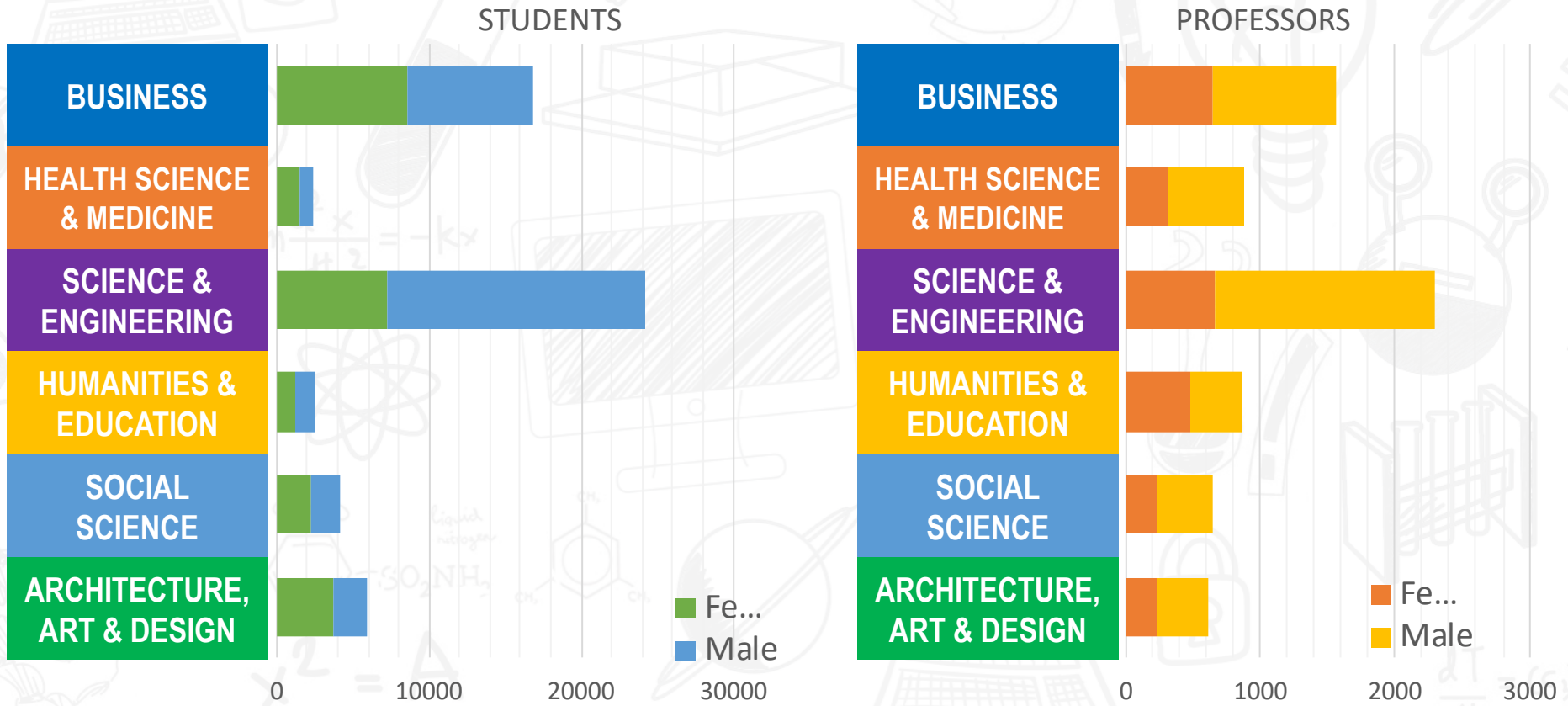
International Offices



26
Campuses
in Mexico



Undergraduate Stats per school



$$(\ln x)' = \frac{1}{x} \quad \int \frac{1}{x} dx = \ln|x| + C$$



**TRANSFORMAMOS VIDAS
CON EDUCACIÓN DE EXCELENCIA**

12. Universidad Tecnológica de Bolívar

Cartagena de Indias - Colombia



Who we are

- Universidad Tecnológica de Bolívar (UTB) is a private, non-profit university founded in 1970 and located in Cartagena de Indias ,a historical and cultural heritage of humanity
- UTB is a regional university managed by the most important business associations in the city
- UTB was the first institution in the city that received the Institutional Accreditation, which is the highest quality recognition granted by the Ministry of National Education to higher education institutions in Colombia



Who we are

- UTB academic offer has more than 38 undergraduate and graduate programs distributed in five main Schools: Engineering, Business and Economics, Social Sciences and Humanities, Education and Basic Sciences
- Currently the University has a student population of approximately **7000** undergraduate and graduate students
- The main strength of the UTB is its vocation as a high level educational and research institution committed **with social and economic development of the region**

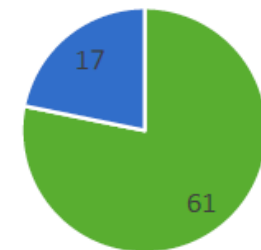


School of Engineering

Student population first semester 2019

Program	Male	Female	% Female
Industrial Engineering	339	315	48%
Civil Engineering	581	259	31%
Enviromental Engineering	91	146	62%
Electrical Engineering	105	15	13%
Electronic Engineering	114	16	12%
Mechanical Engineering	332	36	10%
Mechatronics Engineering	243	36	13%
Naval Engineering	79	43	35%
Computer Engineering	147	12	8%
Chemical Engineering	37	56	60%
Biomedical Engineering	12	12	50%
Total	2046	946	31%

Full-time faculty*



■ Male ■ Female

*From the Schools of Engineering and Basic Sciences



W-STEM Project team

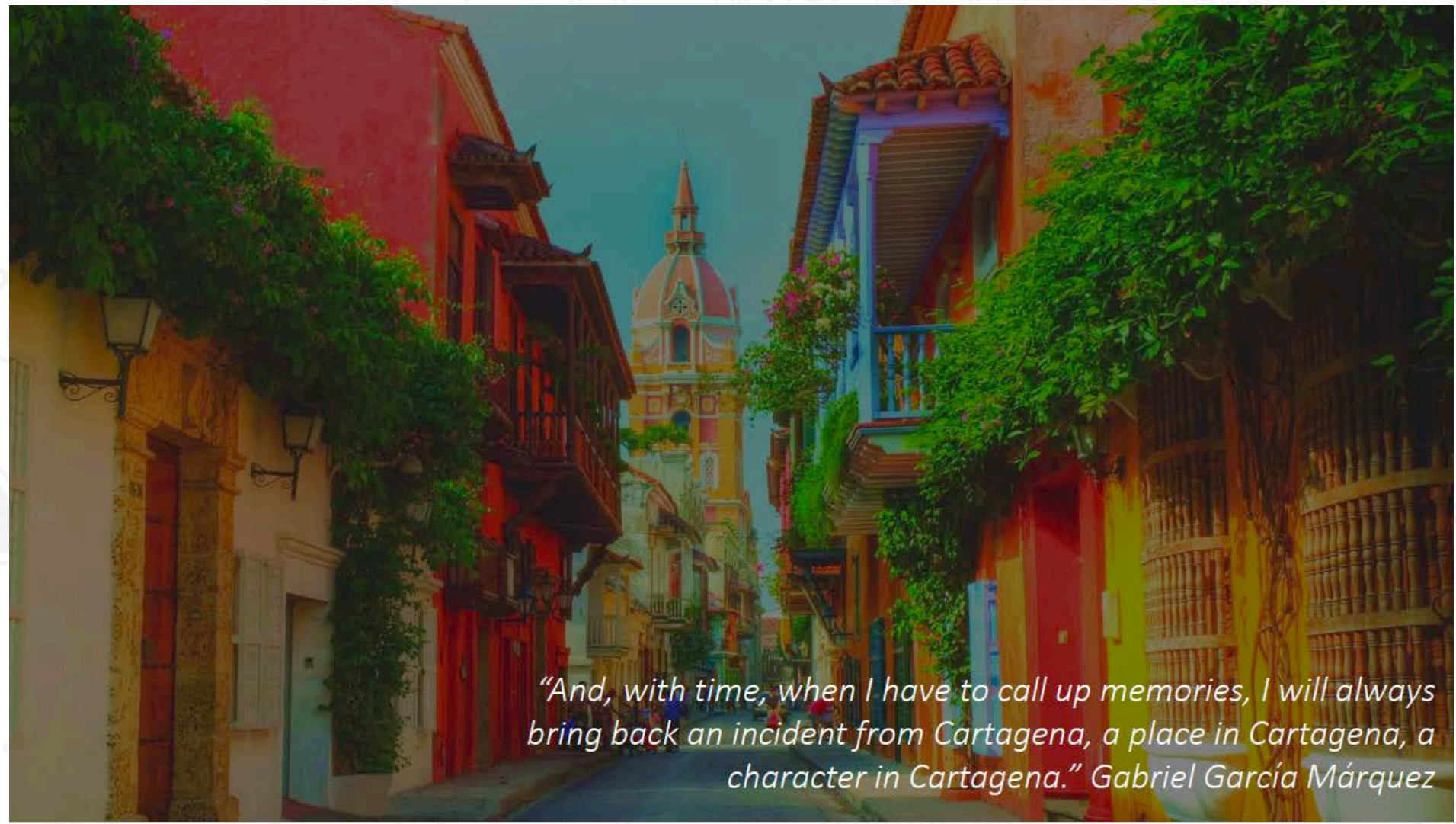
- Ericka Duncan. Business Administrator. Head of International Relations Office
- Jose Luis Villa. BS, MSc Electronic Engineering. PhD in Engineering. Dean of the School of Engineering
- Sonia H. Contreras. BS, MSc Electronic Engineering. PhD in Biomedical Engineering. Associate professor and Director of the Biomedical Engineering program
- Vilma V. Ojeda. BS Physics. MSc Physics. PhD (c) in Marine Sciences. Associate professor of the School of Basic Sciences
- Elsa Ruiz. Business Administrator. MA in Education. Head of the Consulting Office
- Luis Carlos Figueroa. Philosopher. Head of the Centre for Academic Success



Named a UNESCO World Heritage Site in 1984, it's not surprising that Cartagena is the birthplace of Gabriel Garcia Marquez's magical realism and the jewel in the crown of Colombia's Caribbean coastline.



$$(ln x)' = \frac{1}{x} \quad (\frac{1}{x})' = -\frac{1}{x^2}$$



“And, with time, when I have to call up memories, I will always bring back an incident from Cartagena, a place in Cartagena, a character in Cartagena.” Gabriel García Márquez

Disclaimer

W-STEM (Building the future of Latin America: engaging women into STEM) is a project funded under European Union ERASMUS + Capacity-building in Higher Education Programme (598923-EPP-1-2018-1-ES-EPPKA2-CBHE-JP)

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein

Co-funded by the
Erasmus+ Programme
of the European Union



