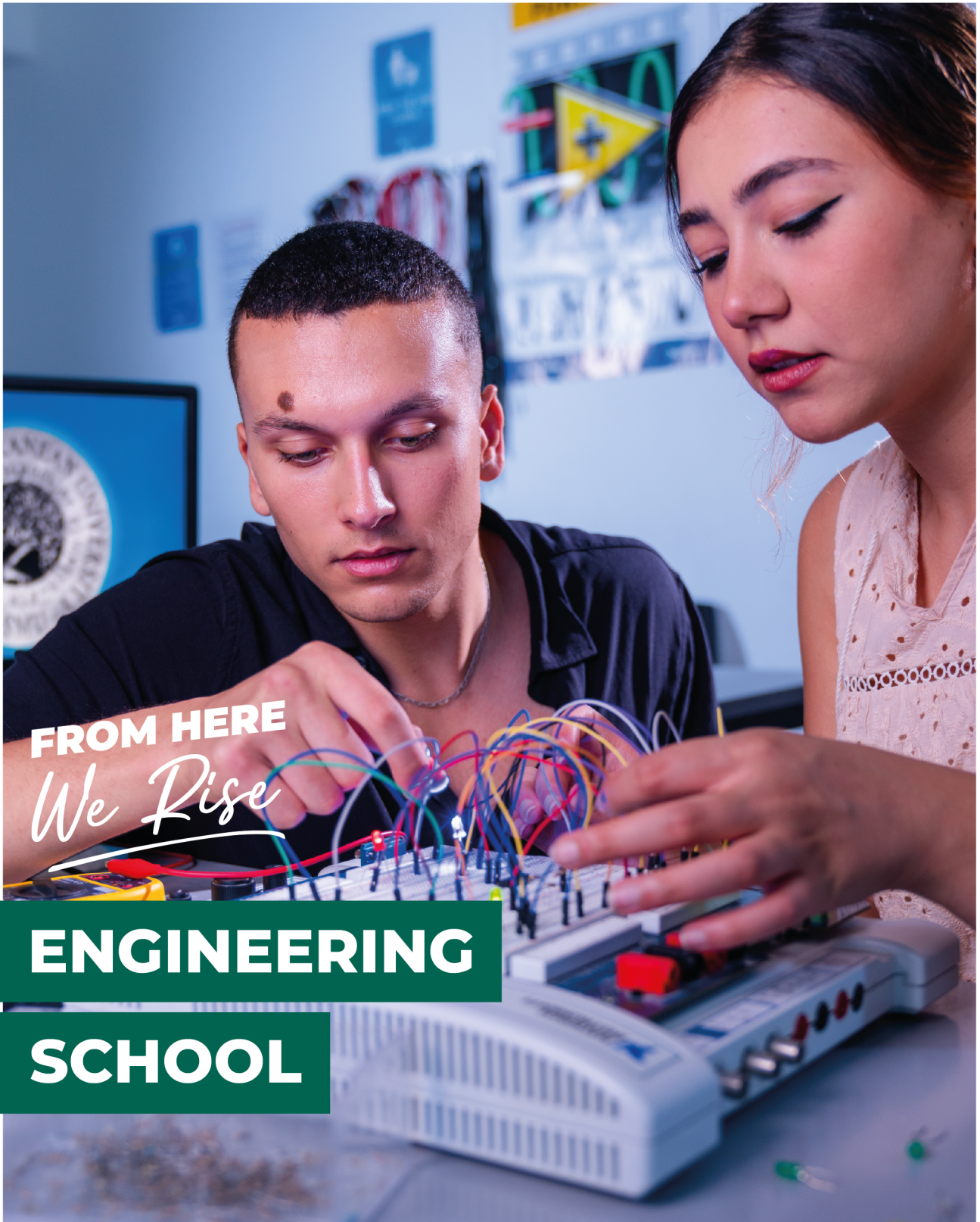**MedTech**
Mediterranean
Institute of Technology

SMU

Engineering
Accreditation
Commission

ABET

FROM HERE
We Rise

ENGINEERING

SCHOOL

• **SINCE 2014** •

Welcome

President's
Message

The strategic location of Tunisia in the heart of the Mediterranean combined with the diversity of its cultural heritage constitutes major assets for the development of a regional hub of educational excellence.

It is in this framework that we have developed the South Mediterranean University (SMU). On behalf of all members of our management team, we want to make your education at SMU a life changing experience and wish you success in your drive for professional excellence.

Mahmoud TRIKI,
Founder & President, SMU

SHAPE YOUR **FUTURE** AT **MEDTECH**

OUR VISION

MedTech aspires to be a regional hub of excellence in engineering education by fostering innovative learning and societal impact.

OUR MISSION

MedTech is committed to train highly qualified engineers capable of contributing and leading innovative ventures in today's globalized world.

OUR VALUES

Diversity | Integrity | Care | Excellence | Creativity

MEDTECH
Mediterranean Institute of Technology

A LIFE CHANGING JOURNEY

MEDTECH
FOR A **GLOBAL**
CAREER

OUR **LEARNING STRATEGY**

MEDTECH IMPLEMENTS AN ADAPTIVE LEARNING STRATEGY THAT OFFERS STUDENTS A LIFE CHANGING EXPERIENCE.

DIGITAL

MedTech is facilitated with technology, information and instructions that are enhanced using various applications, tools and resources to improve the learning experience.

ACTIVE

Our active pedagogy allows our students to be continuously involved in the learning process through individual and group activities, bootcamps, simulation games enabling them to develop a variety of skill sets that differentiate our graduates on the job market.

INTERDISCIPLINARY

By combining our curricular objectives to different disciplines, we help our students acquire the knowledge and skills necessary for their personal and professional development.

OPENING **NEW PROFESSIONAL HORIZONS**

WHY **CHOOSE MEDTECH ?**

The Mediterranean Institute of Technology is a community driven by a shared purpose that is to develop the minds of young engineers. All nationalities and all disciplines are welcome to explore the fields of Software Engineering, Computer Systems, Renewable Energy, Artificial Intelligence and Blockchain applications.

MODERN TEACHING METHODS

To improve the student experience, MedTech provides state-of-the-art information technology, tools and resources suited for both blended and hybrid learning.

HIGHLY QUALIFIED PROFESSORS

Experienced faculty, all holding PhDs from prestigious universities.

STATE OF THE ART FACILITIES & LABORATORIES

Laboratories in major scientific fields (Renewable Energy, Computer Science, Electronics, Physics, Chemistry).
A well-equipped makerspace dedicated to students to elaborate their projects.

WELL-ROUNDED TRAINING IN BUSINESS, MANAGEMENT, GOVERNANCE & ETHICS

Successful engineers require a diverse set of competencies that extend to communication skills, business, management, and an appreciation of the regulatory environment and the interplay between ethics and modern technologies.

POSSIBILITIES OF DOUBLE DEGREES

Opportunities to benefit from visiting professors, joint research projects and dual diploma partnership with the University of Michigan-Dearborn, USA and HEC Montreal, Canada.
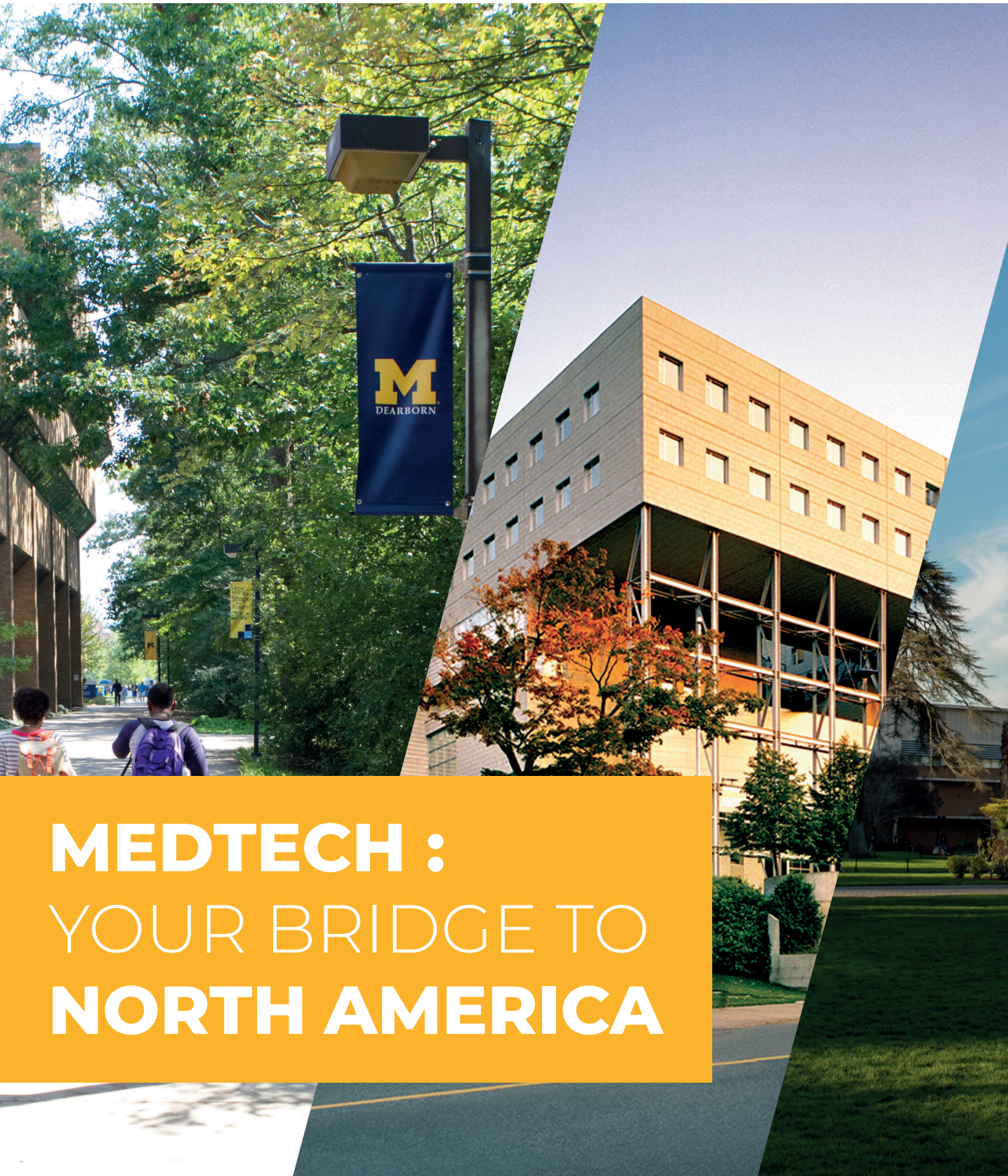
MEDTECH :
YOUR BRIDGE TO
NORTH AMERICA

PARTNERS IN **CANADA**

HEC MONTRÉAL

Double Degree program

PARTNERS IN **EUROPE**

Università di Catania

Research Pathway(Phd)

PARTNERS IN **USA**

M DEARBORN

SJSU SAN JOSÉ STATE UNIVERSITY

Transfer program

UA LITTLE ROCK

Capstone program

MEDTECH ENGINEERING
PROGRAMS

SOFTWARE
ENGINEERING

RENEWABLE ENERGY
ENGINEERING

COMPUTER SYSTEMS
ENGINEERING

Duration
5 years

Credits
300 ECTS

Language
English

PROGRAMS **OBJECTIVES**

MedTech engineering programs are designed to train future engineers to apply scientific knowledge to problem solving.

OUR **TALENT**

OUR STUDENTS PATHS UPON GRADUATION

+33% are enrolled in PhD abroad

+8% are entrepreneurs

+59% joined the business world

WORLDWIDE GRADUATE OPPORTUNITIES IN

University of Rostock (Germany) • University of Porto, Tecnico Lisboa (Portugal) University of Michigan-Dearborn (USA) • Medtech-HEC Montreal

1st and only English-Speaking Engineering School in Tunisia;

1st School Offering an Engineering Diploma in Renewable Energy;

94% Professors with PhDs from Prominent Universities;

4+2 Possibility of Double Degree with University of Michigan-Dearborn, USA.

FORMAT & STRUCTURE

Start Smart → 2,5 years **Pre-Engineering** → 2,5 years **Engineering Cycle** → 6 months **Capstone Project** → **Graduation**

PRE-ENGINEERING

FRESHMAN YEAR

Computer Organization and Design	Mechanics & Thermodynamics	Digital Systems
English Composition	Freshman Project	Academic English
Calculus II	Startup Engineering	Calculus I
	Introduction to Programming	Introduction to Macroeconomics

SOPHOMORE YEAR

COMMON COURSES

Electrical Circuits	Differential Equations	Waves, Optics & Quantum physics
Technical Writing	Electromagnetism	Introduction to Macroeconomics
Object-Oriented Programming	Sophomore Project	Introduction to Psychology
Linear Algebra	Discrete Mathematics	
	Probability & Statistics	

ELECTIVE COURSES

Computer System Engineering	**Software Engineering**	**Renewable Energy Engineering**
Waves, Optics (& Quantum Physics)	Advanced Object-Oriented Programming	Waves, Optics & Quantum Physics
Electrical Circuits	System Development	Electrical Circuits
Computer Organization & Design	Computer Organization & Design	Chemistry II

ENGINEERING CYCLE

Computer Systems Engineering

JUNIOR YEAR	SENIOR YEAR	FINAL YEAR
S1	**S1**	**S1**
Operating Systems	Programming Language & Design	Cyber Security Assessment & Management
Electronic Devices & Circuits	Computer Networks	Robotics Engineering
Embedded Systems	Digital Signal Processing	Pervasive Computing and Cloud
Signal & Systems	Advanced Digital Systems	Machine Learning
Goverance & Citizenship	Introduction to Finance	Data Analytics
Startup Engineering	Effective Technical Communication	Research Methods
S2	**S2**	**S2**
Database Management Systems	Hardware/Software Co-Design	Capstone Project
Feedback Control Systems	Communication Systems	
Graph Theory & Applications	Distributed Systems	
Multivariable Calculus & Numerical Methods	Artificial Intelligence	
Junior Project	Engineering Ethics & Professional Practice	
Introduction to Management	Senior Project	

Software Engineering

JUNIOR YEAR	SENIOR YEAR	FINAL YEAR
S1	**S1**	**S1**
Web Software Development	Computer Networks	Pervasive Computing and Cloud
Operating Systems	Programming Language Design	Cyber Security Assessment and
Database Management Systems	& Implementation	Management
Introduction to Software	Software Analysis & Design	Data Analytics
Engineering	Software Development Methodologies	Machine Learning
Startup Engineering	Technical Communication	Algorithms & Complexity
Introduction to Management	Introduction to Finance	Research Methods
Engineering Seminar	Engineering Seminar	Engineering Seminar
S2	**S2**	**S2**
Global Software Development	Software Quality & Testing	Capstone Project
Mobile Software Development	Distributed Systems	
Requirements & User Experience	Software Architecture	
Graph Theory & Applications	Artificial Intelligence	
Governance & Citizenship	Engineering Ethics & Professional	
Junior Project	Practice	
	Senior Project	
	Engineering Internship	

Renewable Energy Engineering

JUNIOR YEAR	SENIOR YEAR	FINAL YEAR
S1	**S1**	**S1**
Thermodynamics	Solar Energy Systems	Energy, Environment
Electrical Power Systems	Feedback Control Systems	& Sustainability
Chemistry II	Biomass & Bioenergy Sytems	Power Systems & Smart Grid
Signal & Systems	Fluid Mechanics	Energy Conversion & Storage
Startup Engineering Governance &	Effective Technical Communication	Artificial Intelligence
Citizenship Engineering Seminar	Introduction to Finance	Data Analytics
	Engineering Seminar	Research Methods Engineering
		Seminar
S2	**S2**	**S2**
Electromechanical Conversation	Energy Management & Analysis	Capstone Project
Systems	HVAC in Buildings	
Intermediate Heat Transfer	Wind Energy	
Graph Theory & Applications	Power Electronics	
Multivariable Calculus Introduction	Engineering Ethics & Professional	
to Management Junior Project	Practice	
	Senior Project	
	Engineering Internship	

HEC MONTRÉAL
HEC MONTREAL
Canada

UMD
USA

OAKLAND UNIVERSITY
Oakland University
USA

UA LITTLE ROCK
University of Arkansas
USA

SJSU SAN JOSÉ STATE UNIVERSITY
SAN JOSE Sillicon Valley
USA

UNIVERSITY OF South Carolina
South Carolina
USA

CESI ÉCOLE D'INGÉNIEURS
CESI
France

INTERNATIONAL
OPPORTUNITIES

EXCHANGE PROGRAM

MedTech students are given the opportunity to go on exchange in one of our partner universities like France or Portugal. During the exchange, they spend a semester abroad where they experience new ways of learning as well as a rich cultural exchange.

INTERNATIONAL COLLABORATIVE PARTNERSHIPS

MedTech students can benefit from one of our International Collaborative Partnerships (ICP) and earn an MSc in either Business, Business and Technology or Engineering. Formats are either 3+2, 4+2 or 5+1.

Please see our website for more details.

IESEG
SCHOOL OF MANAGEMENT

IESEG
📍 France

KEDGE
BUSINESS SCHOOL

KEDGE
📍 France

LUISS

LUISS
📍 Italy

SICILIAE STVDIVM GENERALE · 1434 ·

Università di Catania

Catania
📍 Italy

MedTech
Mediterranean
Institute of Technology

SMU

CAPSTONE PROGRAM

In the middle of their 5th year of Engineering, and before graduating, MedTech students can spend 6 months in one of our Capstone partners, to work on their capstone projects for the end of their studies, with the assistance of both MedTech professors and a professor from the partner university.

DOUBLE DEGREE PROGRAM*

MedTech students can benefit from a Double Degree oppor- tunity with HEC Montreal and receive a BBA from HEC Montreal, plus a 5-year National Engi- neering Degree from MedTech within 5 years.

Please see page 10 for more details.

MEDTECH LICENCE
IN COMPUTER SCIENCE

Duration
3 years

Credits
**180 ECTS**

Language
English

MESRS

PROGRAM
OBJECTIVES

The main objective of the Licence program in Computer Science is to train future graduates to be successfully employed in the field of computing, or to enroll in advanced degrees in computer Science or any other related discipline.

MedTech's Computer Science Licence program provides students with a combination of advanced technical and theoretical knowledge, best engineering practices, and emerging technologies to develop software that meets high quality standards.
The educational program has a thorough basis in the principles and practices of computing as well as real-world learning experiences through team-centered and hands-on projects to prepare students properly to engage in further learning.

Besides technical skills, upon successful completion of the program, graduates will acquire social and entrepreneurial skills.
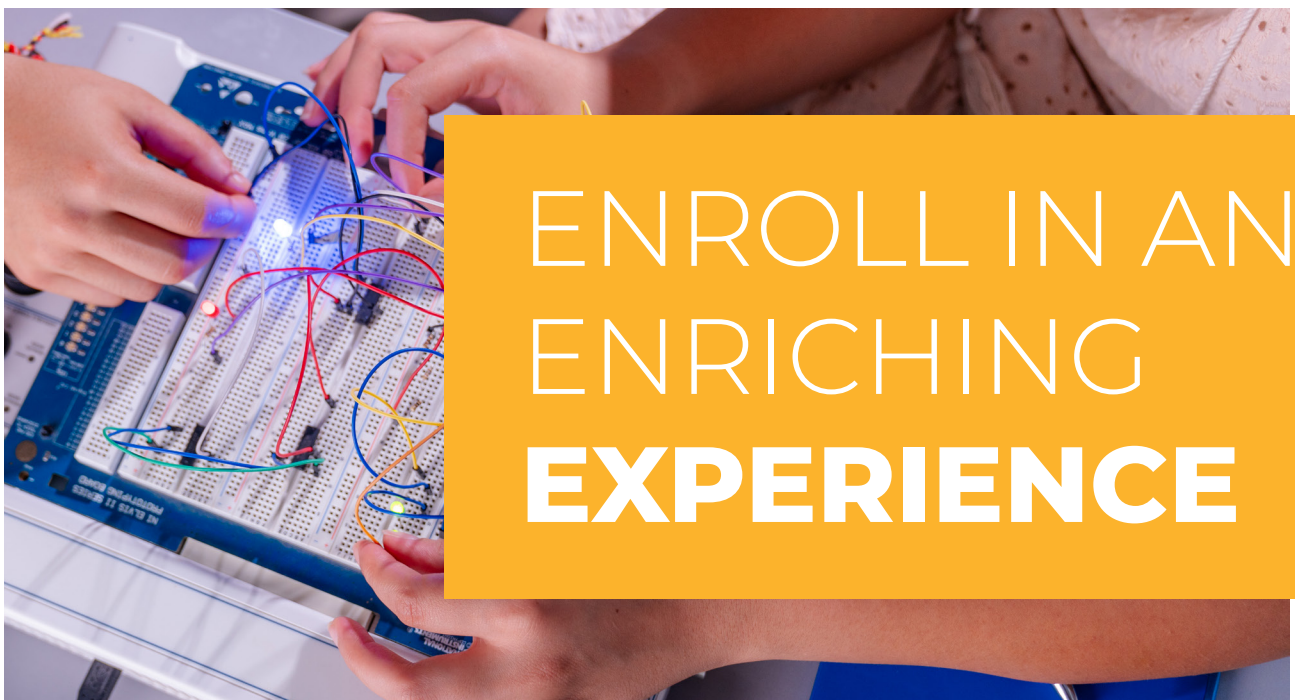
ENROLL IN AN ENRICHING
EXPERIENCE

LICENCE IN COMPUTER SCIENCE

YEAR 1

Term 1

Calculus I
Introduction to Algorithmics & Programming
Digital Systems
Multimedia Technologies
Introduction to Psychology
Academic English

Term 2

Discrete Mathematics
Calculus II
Databases
Introduction to Computer Networks
Computer Organization & Design
English Composition
L1 Project (Python)

YEAR 2

Term 3

Linear Algebra
Object Oriented Programming & Advanced Laboratory
Technical Writing
Object Oriented Design
Introduction to Engineering Mechanics
Introduction to Operating Systems
Introduction to Management

Term 4

Web and Mobile Software Development
Graph Theory and Applications
Introduction to Electrical Circuits
Introduction to Distributed Systems
Probability & Statistics
Data Structures & Algorithms
Introduction to Automata Theory and Compilation
L2 project (Agile Methods & IOT)

YEAR 3

Term 5

Software Engineering
ERP and UX design
Effective Technical Communication
Startup Engineering
Introduction to AI & ML
Cloud Computing
Big data & Cyber security

Term 6

Capstone Project

THERE'S A PLACE FOR **EVERYTHING,** IT'S CALLED **COLLEGE**

MEDTECH MASTER PROGRAMS

BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE IN BUSINESS COMPUTING

SOFTWARE ENGINEERING

CYBER SECURITY
FULL-TIME (2 YEARS)
PART-TIME (2.5 YEARS)

Duration
2 years

Credits
120 ECTS

Language
English

PROGRAMS **OBJECTIVES**

The Master programs at MedTech provide advanced knowledge and methodological competences over a broad range of fields and techniques in the four different areas of specialization. The master programs focus on competences for effectively managing people, projects and processes as well as developing technical skills necessary for each specialization.

PROGRAM BREAKDOWN
Master

BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE IN BUSINESS COMPUTING

YEAR 1

Artificial Intelligence	Algorithms & Graphs
Advanced Statistics & Data Analytics	Distributed Systems
Database Management Systems	Pervasive Computing & Cloud
Digital Marketing	Business Process Modeling
Effective Technical Communication	Engineering Ethics & Professional Practice
Digital Transfromation & Industry 4.0	Digital Banking & Fintech

YEAR 2

Machine Learning	Cyber Security assessment & Management
Distributed Ledger Technology, Blockchain & Smart Contracts	Managing innovation & entrepreneurship
Financial Markets Systems & Technology	Business Environment
	Master Thesis

SOFTWARE ENGINEERING

YEAR 1

Software Analysis & Design

Database Management Systems

Software Quality & Testing

Advanced Programming

Startup Engineering

Artificial Intelligence

Requirements & User Experience

Software Architecture

Software Development Methodologies

Web & Mobile Software Development

Engineering Ethics & Professional practice

YEAR 2

Machine Learning

Data Analytics

Pervasive Computing and Cloud

Cyber Security and Assessment

Research Methods

Robotics

CYBER SECURITY

YEAR 1

Cryptography

Cyber Security Assessment And Management

Ai For Cybersecurity

Computer Network Security

Engineering Ethics & Professional Practice

Incident Response And Recovery

Machine Learning

IOT Security

Effective Technical Communication

Pervasive Computing & Cloud

Design And Development Of Secure Software

Ec-c Certification: CEH Or NDE

YEAR 2

Blockchain Technology

Informatics Security And Law

Security And Privacy

Information Technologies Security

Research Methods

Digital Forensics

Master Thesis

ENHANCE YOUR
TECHNICAL
SKILLS

EXECUTIVE
PROGRAMS

EXECUTIVE MASTER IN
BIM & ERP MANAGEMENT

EXECUTIVE MASTER IN
DIGITAL HEALTH AND ARTIFICIAL INTELLIGENCE

EXECUTIVE MASTER IN BIM & ERP MANAGEMENT

The Executive Master in BIM & ERP Management is a part-time program, designed to tailor the work and life commitments of participants. Classes meet four days a month (Thursday through Sunday from 9:00 AM to 6:00 PM) over a 17-month period, followed by three additional months dedicated to the final project.

The Building Information Modeling (BIM) and Enterprise Resource Planning (ERP) methodologies have revolutionized the Architecture, Engineering, Construction, and Operation (AECO) industry. Yet there is a shortage of highly qualified practitioners to manage BIM projects.

The Executive Master in BIM & ERP Management allows participants to acquire a high level of know-how in the management of processes, equipment, and workflows involved in the construction sector, throughout the entire lifecycle of a building project, from the planning and design phase, to procurement, construction and maintenance stage..

The program consists of modules and workshops aiming at:

Providing the knowledge and skills of how BIM and ERP methodologies can be applied across a construction/infrastructure project from conception to demolition.

Developing critical thinking, leadership, and decisionmaking skills, and the ability to apprehend strategic decisions dealing with both the technical administration and the execution of a project.

Developing communication and collaboration skills.

EXECUTIVE MASTER IN DIGITAL HEALTH AND ARTIFICIAL INTELLIGENCE

The Executive master's in digital health and AI is Designed to teach the interdisciplinary knowledge and skills required to drive innovation in the expanding area of digital health.

Digital Health and AI program recognizes the interaction between technologies and people in healthcare and draws on the expertise of faculty from across SMU university and internationals to create an interdisciplinary learning experience, healthcare systems, medical Law, change management, engineering, artificial intelligence, and data science.

Aimed at early- or mid-career professionals, participants to the Applied Digital Health and AI MSc will come from a wide range of backgrounds, including health professionals, public health, statistics, computer science and engineering.

Classes meet four days a month (Thursday through Sunday from 9:00 AM to 6:00 PM)

The program consists of modules and projects aiming at:

Providing the essential tools and practical skills to pursue a career in leading digital transformation for health.

Developing leadership and critical thinking for Digital Transformation in Health with assurances of their ethical, safe, and effective deployments.

Developing Communication and Change management skills.

Operating and leading in a multidisciplinary environment

SMU INCUBATOR

Launched in September 2019, the SMU Incubator was established to nurture the leadership community of South Mediterranean University (MSB & MedTech). Embracing innovation within a vibrant entrepreneurial environment, +10% of our students and alumni are trailblazers, shaping the future and creating value.

With a wealth of faculty expertise, SMU is dedicated to fostering its driven talents and project leaders by aiding the growth and execution of their business concepts. The Incubator provides a comprehensive 6-month training for entrepreneurs and spinoffs in the early stage, offering workshops, mentorship, coaching, and access to MSB & MedTech resources and network. This culminates in Pitching Sessions before expert panels, potential clients and interested investors

The SMU Incubator is not just a training ground; it's a gateway for entrepreneurs and companies to expand their horizons to new markets and secure funding through our extensive Alumni and Partner network and have impact on our communities.

Our Co-working Space is designed as a collaborative hub for each cohort to leverage collective skills, resources, and business-engineering synergies.

In its third year, the latest cohort showcased their innovative FinTech, HRTech, and FoodTech startups to investors on DEMO DAY after months of guidance from top mentors and industry experts.

SMU CAREER SERVICES

In today's competitive job landscape, effective mentorship is more essential than ever to make informed career decisions. Our career center is dedicated to closing the gap between the demands of professional life and our academic offerings, equipping our students with the necessary skills and insights for professional triumph.
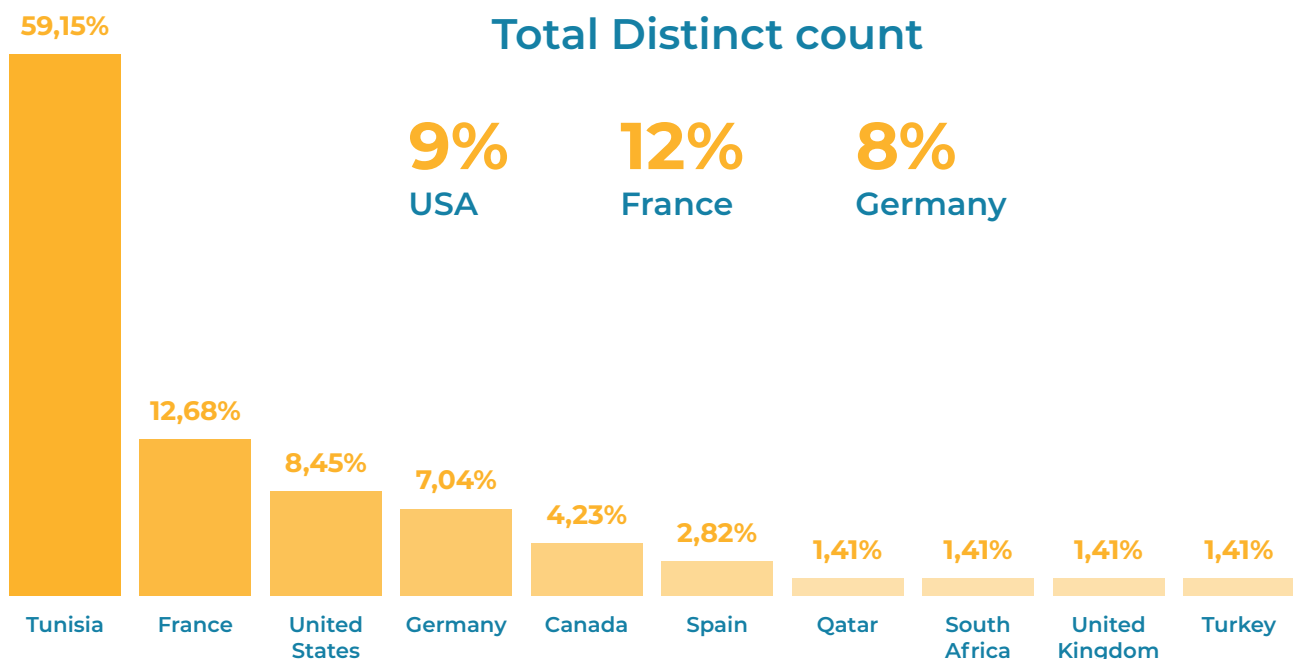
SMU Robust corporate partnerships provide students with essential career development resources and direct pathways to employment opportunities. These collaborations offer internships, job placements, and practical insights into industry trends, greatly enhancing the employability and real-world preparedness of graduates.

ALUMNI AND FAMILY RELATIONS

Serves as a hub for graduates to connect with their former school and each other. It offers networking events, and mentorship programs to support alumni's professional growth. The center also organizes reunions, manages alumni records, to enhance the university's resources and programs. Its goal is to maintain a vibrant alumni community, provide ongoing support to build a strong, engaged SMU community that contributes to the institution's legacy and supports current students.

WHERE ARE OUR MEDTECH ALUMNI TODAY ?

Total Distinct count

9% USA   **12%** France   **8%** Germany

Country	Percentage
Tunisia	59,15%
France	12,68%
United States	8,45%
Germany	7,04%
Canada	4,23%
Spain	2,82%
Qatar	1,41%
South Africa	1,41%
United Kingdom	1,41%
Turkey	1,41%

MEDTECH SENT TO

GLOBAL ENR
Vneuron Risk & Compliance
GIZ

Energy Consult
Berkeley Lab
University of Michigan

Worldine
Ford

FONDATION
SMU

Fondation SMU
MSB - MedTech - LCI
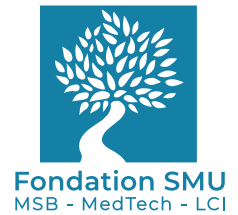
Promotes and supports the development of talents through academic excellence.
Fondation SMU is a Tunisian non-profit association created in 2018 by South Mediterranean University to create and manage its Corporate Social Responsibility programs.
Its aim is to promote and support the development of Tunisian youth through the funding of student scholarships, research projects as well as employability and capacity building initiatives.

FOSTER TALENT & OPEN QUALITY EDUCATION TO ALL

Offer scholarships and loans to students who have the talent and ability to succeed but concerns about funding.

DRIVE RESEARCH EXCELLENCE

Provide an optimal framework for research around projects that have the potential to positively impact the social and economic sectors.

BRIDGE EDUCATION

Facilitate employability of young graduates by bringing them into a high-level training coupled with apprenticeship.

DEVELOP COMPETENCIES & SKILLS

Deploy capacity building programs that develop competencies and skills.

www.fondationsmu.org

AN EXCITING
STUDENT LIFE

SMU Student Life
MSB - MedTech - LCI
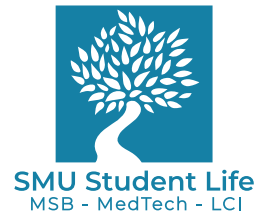
For broader horizons and for a learning experience that does not stop at the doorsteps of the classrooms, the campus features many clubs and associations that provide extracurricular and co-curricular opportunities for students, launching social projects, raising funds and donations for those in need or developing leadership skills and aiming for peace or wining competitions and bringing back trophies with SMU Sports Club. Our students are always learning, developing, and most importantly following their passions around and beyond campus.

Resting area, Mezzanine, **MedTech**

Cafeteria, ground floor, **MedTech**

Cafeteria, ground floor, **MedTech**

SMU
MAKERSPACE

Dedicated to creativity and innovation, SMU Makerspace is a space where students, faculty and alumni can gather to invent, create and learn with a "do it yourself" spirit. SMU Makerspace enables SMU Community members to explore new interests and to develop creative projects from conception to implementation.

Created on April 1st 2023 at the cutting edge of technology, the Trading Room of the South Mediterranean University offers 18 specialized workstations allowing the University's students to experience the environment and the activity of the highly performing financial analysis and trading platforms. Students and faculty members benefit from access to Refinitiv Eikon and Datastream platforms and to Cloud / Windows based Financial Trading and portfolio management simulation platforms.

IN THIS SPACE,
YOU MAKE
**YOUR DREAMS
COME TRUE**

TESTIMONIALS

RYM KRIAA
MedTech ALUMNA
MAJOR : RENEWABLE ENERGY

Being the first and only English-Speaking Engineering School offering an Engineering Diploma in Renewable Energies in Tunisia, MedTech provides you with plenty of opportunities to sharpen your skills and mind.

AHMED AZIZ OUERTATANI
MedTech ALUMNUS
MAJOR : COMPUTER SYSTEMS ENGINEERING

I belong to the first cohort of MedTech. I am extremely grateful for being provided with a unique opportunity to build a diversified and powerful network and gain technical engineering skills.

FATMA EZZAHRA BEN YEDDER
MedTech ALUMNA
MAJOR : SOFTWARE ENGINEERING

MedTech is one of my best life experiences. During my Software Engineering curriculum, I not only gathered a strong technical skills' background but also learned various soft skills including problem solving, public speaking, technical English communication and project management.

ADMISSION **PROCESS**

Start Smart → **Form & Documents** → **Admission Tests** → **Decision**

To start the application process follow the link:
cms.smu.tn/admission

SCHOLARSHIPS & FINANCIAL AID

Scholarships: MedTech grants merit scholarships for outstanding students who cannot afford the tuition fees in order to promote academic excellence and provide better accessibility to quality education. MedTech also provides diversity scholarships to further enhance the cultural and international diversity on the SMU campus.

Financial aid: SMU assists students in the process of getting grants, scholarships or student loans.

Student employment: SMU students can find many employment opportunities on campus, such as part-time librarian or internships in different SMU departments.

ADMITTED STUDENTS NEXT STEPS

Housing: SMU is located in the new development Lac 2 where you will find higher-end accommodation. Cheaper options are Jardins de Carthage or El Aouina. La Marsa and Sidi Bou Said are popular options with expats as they are quite diverse and have many options for entertainment.

Bank account: Opening a bank account will probably be one of your priorities when moving to Tunisia. You will only need to provide: A copy of your certificate of registration at SMU, a copy of the first page of your passport, a copy of your Residency Card and a housing contract.

Health services: On campus, students will find a full-time nurse and a contracted doctor with whom you can have an appointment at the nursery (Mezzanine, MSB building). SMU can also help you get a health insurance.

South
Mediterranean
University