



UTM Outreach Activities 2022-2023

<https://utm-shine.com/outreach-events/>



SUSTAINABLE
DEVELOPMENT
GOALS





UTM Outreach and Accessibility Policy

University Accessibility and Equality in Outreach Programs: Enhancing Societal Impact in Tunisia

The University of Tunis El Manar (UTM) is deeply committed to fostering accessibility and inclusivity in its outreach programs, aiming to make a positive societal impact across Tunisia. By ensuring equal access to education, research, and innovation, UTM actively supports diverse communities, with a particular focus

on underrepresented and marginalized groups, including people with special needs and displaced individuals. These efforts reflect UTM's broader mission to promote equality, community engagement, and contribute to Tunisia's economic growth.

Accessible Outreach Activities for All Age Groups

UTM's outreach initiatives cater to a wide spectrum of audiences, from primary school students to Baccalaureate students preparing for higher education and beyond. Events held at the City of Science in Tunis are designed to make science and technology accessible to all, with a focus on engaging and inclusive activities that spark interest among young learners from across Tunisia. Specialized programs, such as astronomy workshops organized by the SAT association, are particularly aimed at creating an environment where all students, regardless of their background, can participate and thrive in scientific exploration.

Support for Health and Well-being in Local Schools and Hospitals

UTM's medical teams, in collaboration with local hospitals and organizations such as AssociationMed, play a crucial role in promoting health literacy and well-being throughout Tunisia. They regularly visit schools across the country, providing health and hygiene lessons that benefit the general student population. These outreach efforts are especially important for students with special needs, ensuring they have access to essential health education tailored to their needs. Moreover, UTM's science and technology clubs visit children's hospitals, offering enriching educational activities and emotional support to children undergoing cancer treatment, including those with special needs. These visits not only provide cognitive engagement but also contribute to the mental and emotional well-being of children facing serious health challenges, with support from hospitals and local healthcare networks like AssociationMed.

Guidance for Future Education and Career Choices

Understanding that the transition from secondary to higher education is a pivotal moment for many students, UTM organizes career forums for Baccalaureate students in Tunisia. These forums provide essential guidance to help students, including those with special needs, navigate their higher education choices and future career paths. UTM's goal is to ensure that all students, regardless of physical or learning challenges, are equipped with the resources to make informed decisions about their academic and professional futures. This approach helps build a workforce prepared for contributing to the country's economic growth and development.

Inclusion and Equity Through Targeted Programs

UTM's commitment to equity goes beyond physical accessibility. Initiatives such as PAQGAGE and INSIDE are designed to promote inclusion, diversity, and equity within the university environment, ensuring that individuals with special needs, as well as displaced individuals, have equal access to university facilities, programs, and opportunities. These programs are specifically tailored to create a welcoming space for participants from various backgrounds, including those facing social, economic, or physical challenges, enabling them to actively participate in UTM's academic and community-based initiatives. By empowering these individuals, UTM contributes to creating a diverse, skilled workforce that drives economic development.

Strengthening Societal Impact and Economic Growth Through Outreach to Displaced Communities

Recognizing the challenges faced by displaced individuals, UTM is committed to ensuring that its outreach activities are inclusive and accessible to those who may have been affected by displacement. Through adapted outreach events and webinars, UTM ensures that displaced people, including refugees and those in vulnerable situations, can benefit from educational and support programs. These efforts aim to reduce the educational gaps faced by displaced populations, promoting social inclusion and offering a pathway to a better future. In turn, this helps cultivate a more resilient society, fostering an inclusive economy that benefits all.

Conclusion

Through its accessible and inclusive outreach programs, the University of Tunis El Manar is making significant contributions to societal well-being and economic growth across Tunisia. By providing equitable access to resources and fostering a supportive environment for all—particularly people with special needs, displaced individuals, and those supported by healthcare networks like AssociationMed—UTM solidifies its role as a leader in societal impact, community engagement, and economic development. These initiatives are a testament to the university's dedication to making education accessible and beneficial for all, helping to shape a more inclusive, prosperous, and sustainable society.

Outreach and community Activities



The first Sustainable Development Goal is to end **poverty** and face **inequality** in all its forms and everywhere in the world.

Most of studies dealing with poverty and inequality were conducted in the Faculty of Economics and Management of Tunis (FSEG Tunis), particularly within the research laboratory “PS2D”: Prospective, Stratégies et Développement Durable (Prospective, Strategies and Sustainable Development).

The Laboratory hosted its IVth Edition around the Sustainable Development Goals in Maghreb countries

In a series of papers, members from another UTM Research Unit, “Econometrics Applied to Finance” have conducted studies focusing on **poverty measures**:

- 1- Khaled Nasri & Bisma Belhadj, 2018. "Measuring Vulnerability to Multidimensional Poverty in Tunisia: Dual cut-off method and Fuzzy Sets approach," Working Papers 1262, Economic Research Forum, revised 03 Dec 2018.
- 2- Nasri, Khaled & Belhadj, Bisma, 2017. "Multidimensional Poverty Measurement in Tunisia: Distribution of Deprivations across Regions," MPRA Paper 83318, University Library of Munich, Germany.
- 3- Belhadj Bisma, 2016. "Inequality among the poor in poverty measure case of Tunisia (2005–2010)," OPSEARCH, Springer; Operational Research Society of India, vol. 53(2), pages 409-425, June.
- 4- Asma Zedini & Bisma Belhadj, 2015. "A New Approach to Unidimensional Poverty Analysis: Application to the Tunisian Case," Review of Income and Wealth, International Association for Research in Income and Wealth, vol. 61(3), pages 465-476, September.



Participation in solidarity programs

- The University of Tunis El Manar encourages all social solidarity programs including **the national campaign to collect documents and educational materials for needy students** organized each year.
- The University of Tunis El Manar processes 03 types of **national scholarships** for students in Bachelor, Master and PhD.
The call for scholarship applications is made by an announcement on the site during the provided period. The pre-selection of the files is done at the level of the university, the final decision at the level of the services of the Ministry of Higher Education and Scientific Research which centralizes all the requests for grants.
The granting of scholarships and university loans is subject to certain conditions, mainly the annual income of the parents, as well as the enrollment in a public institution of higher education.
- The Faculty of Economics and Management of Tunis (FSEGT) has **collected 59 laptops, 108 tablets as well as flash drivers** in order to allow students in need to follow online courses on Google Meet, Moodle and Microsoft Teams... This was achieved thanks to collaborations with the private sector (Orange...) as well as the research labs belonging to the faculty.

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

The University Restaurant Tunis El Manar

Our university restaurant provides for all students 3 meals each weekday.

- Breakfast: From 7 to 8 am
- Lunch From 12.00 to 13.00
- Dinner From 18.30 to 19.30

Concerning lunch and dinner, the restaurant offers a complete meal: Entry, Main Course and Dessert.



- Tunisian students regularly dine at the university restaurants for both budget and practical reasons. They are often located on campus or near town center universities.
- For 200 millimes (**0,063 euros**), you can enjoy a complete meal, with starter, main course, and dessert. To have access and to pay for your meal, just show your student card.



SDG2 project and action in UTM

- Horizon 2020 (EU Research & Innovation programme)
- Breeding for Resilient, Efficient and Sustainable Organic Vegetable production (BRESOV)



- MAYA Master in Agricultural and hydrological Approaches: European Commission, Erasmus+, KA2 – Capacity-building in the Field of Higher Education



Maya Project: second field visit organized by the University of Tunis El Manar to complete the Master on Integrated water management and sustainable agriculture.

In the framework of the **MAYA project**, Master in Agricultural and hydrological Approaches to a better sustainable development, the University of Tunis El Manar organised the second field visit attended by 4 professors and 19 students

The trip had for main theme the management of water and soil resources in the arid zones of the South from Tunisia, in particular: Gafsa / El Guettar, Tozeur, Fatnassa / Kebili and Gabès.

The field visit gave the students the opportunity of using the multiparameter sonde and the GPS Trimble bought thanks to the financing of the project MAYA by the European Union.

- Volatolomics test for the diagnosis of bovine tuberculosis (btb-test)
- Memorandum signed between FSEGT and INAT



The Faculty of economics and management of Tunis (FSEGT, UTM) and the National Agronomic Institute of Tunisia organised the **second edition of the *PhD Winter School on "Water Economics and policy"***. The programme of the School consisted of six days of teaching by prominent academics, supplemented by students' presentations

This Winter school concentrates on economic characteristics of water resources and the growing problem of water scarcity. It covers the economics of water resources, with special emphasis on the MENA countries and Tunisia where water is an extremely scarce resource. The aim is to teach both economic tools and theory – how economists go about analyzing key aspects of water policy – and what has been learned by applying these tools to water issues all over the world with references to successful case studies. The winter school is addressed to Economics and Engineering students. The course looks at prevailing pricing system of urban water and provides comparative analyses of different ways of transition to the efficient pricing and the role of government policy. The course also examines the food, water and energy nexus.



■ Students from Medical Biotechnology Institute (UTM) create projects to end hunger
 The Medical Biotechnology Institute (UTM) promotes entrepreneurial initiatives and encourages students to become familiar with the business world, through the development of creative and innovative thinking on human nutrition and health.

Student projects

These are 2 examples of our students' works:

The big idea of this team is to valorize camel milk into cosmetic products (skin cream, shampoo etc ...), The valorization of camel milk could serve as lever for the fight against poverty and securing the income of pastoralists and agropastoral camels.

This team develop an innovative bsissa-based added- value **food** to end child malnutrition. This Bsissa **like** the traditional Tunisian product **is** 100% natural but, without additives, preservatives and uses innovative flavors, highly nutritious that offers a high quantity/nutrition ratio!



Before the COVID19 pandemic, major progress was made in improving the health of millions of people. Significant strides were made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. But more efforts are needed to fully eradicate a wide range of diseases and to address many different persistent and emerging health issues. By focusing on providing more efficient funding of health systems, improved sanitation and hygiene, and increased access to physicians, significant progress can be made in helping to save the lives of millions. Health emergencies pose a global risk and have shown the critical need for preparedness.



8- The Digital Health Hackaton



9- The « AI Health Hackaton » to develop digital solutions to health disorders (from July 4th to 6th 2021). This event was co-organized by the Université Tunis El Manar UTM, la société Tunisienne de Télémédecine & e-santé, LEDDRNA (FSEGT, UTM), Sys'COM (ENIT,UTM), le LR -NOCCS (ENISO) , GIZ et Realités.

10- The InSPIRES « Ingenious Science shops to promote Participatory Innovation, Research and Equity in Science ». This project was held by Institut Pasteur de Tunis (UTM is a stakeholder), in frame of the H2020 project (Workpackage : Science For and With Society SWAFS). The main objective was to link between Civil society and Academia, in order to enhance the wellbeing of vulnerable population. Ten Science Shops project were launched and have treated several health problems such as diabetes, deafness, HIV, hepatitis A, lung cancer... These projects were also presented in the Citizen Science-SDG Conference in Berlin.



Communication with External stakeholders

The UTM has published its its quality assurance manual which describes the organization, activities, and different responsibilities within the University, as well as the policy and the quality management system (QMS).

- The procedures manual, the objective of which is to provide a framework for the execution of administrative operations and to describe the administrative, financial, and accounting organization.

Evaluation of teaching programs

Within the framework of the PAQ-DGSU project, teaching committees by program have been set up in each institution. Their missions and their interactions with their quality committees have been elaborated and validated by the university council

In addition, the university's information system represents a major project with several objectives:

- Increase the number of services provided online
- Increase the visibility of the university, its institutions, and its research laboratories on a national and international scale to facilitate academic collaboration
- Facilitate access to information

Since June 2021, the UTM has been mapping the various services and identifying the needs of the different stakeholders in order to develop the information system plan adapted to its needs.



Type 2 diabetes and high blood pressure: real public health burden

A speechless collaboration: Deafness in Tunisia



https://fr.slideshare.net/Pasteur_Tunis/science-avec-et-pour-la-socite-le-projet-inspires
<https://inspiresproject.com/isginspiring/a-pilot-collaborative-project-that-could-be-adopted-by-other-regions-in-tunisia/>
<https://inspiresproject.com/isginspiring/engaging-civil-society-in-hiv-treatment-adherence-in-tunisia/>
<https://inspiresproject.com/isginspiring/a-speechless-collaboration-deafness-in-tunisia/>

The prime minister of Tunisia: Prof.Najla Bouden is a woman. She is a professor of higher education at the National Engineering School of Tunis at Tunis El Manar University, having specialized in geosciences. Her work has focused on seismic hazards, which led her to train many executives of the Tunisian Petroleum Activities Company. She held also senior roles at the Tunisian Ministry of Higher Education and Scientific Research. In 2011, she was appointed Director General within the Ministry, then in 2015 held a position in the cabinet of Minister. In September 2016, she was responsible for the \$70 millions World Bank-funded program "PromEssE" to reform and "modernize" university education in order to help alleviate widespread unemployment among Tunisian graduates, a major social issue in the country.



The UTM has a strong portfolio of actions and projects involving women in the STEM field. We have lately participated in the COLLABORATIVE project in partnership with the PURDUE UNIVERSITY, USA, The National Science Foundation NSF, USA and many international partners.

This project involves research in four countries (Jordan, Malaysia, Saudi Arabia, and Tunisia) to assess the contextual factors that encourage women's participation in engineering in tertiary education and as a career. In three of the four countries identified (Jordan, Malaysia, and Tunisia), women's participation in engineering is much higher than in the US, despite social, political, and economic restrictions on women's participation in public life. In the fourth country (Saudi Arabia), women's engineering participation is also on the rise. This project seeks to understand the links between cultural context and expanding women's STEM participation by studying the drivers of women's participation in these contexts. The research is significant because it promises to document factors that encourage women's successful participation in STEM in social, political, and cultural contexts that are very different from the US. These explorations of women's success, in turn, promise to shed light more generally on how context shapes women's participation in STEM in ways that inform our efforts to broaden participation in the US.

A study undertaken by researchers from the national School of Engineering of Tunis at our University highlighted that, Tunisian policymakers have historically embraced gender equality (Murphey, 2003). Yet recent studies found that Tunisian engineers indicate that traditional gender perceptions and expectations tied to familial roles did not fit with women's engineering participation (DeBoer, 2007; Zghal, 2006). The overall educational enrolment figures are approximately equal for women and men in the secondary (89% for boys and 93% for girls, respectively) and tertiary (25% for men and 21% for women) levels (UIS, 2015). Researchers in STEM fields are nearly half women (UIS, 2015). The overall population female-male literacy gap (71% for women, 87% for men) is smaller among those ages 15-24 where (96% for women, 98% for men, UIS, 2015). Tunisia's secularism, active civil institutions, and the longstanding involvement of groups like the National Tunisian Women's Union have improved women's general employment and their engineering participation.





Compared to Muslim majority countries, Tunisia has **one of the highest values in the gender equality perception index** (which combines the responses to different questions on gender equality) and where the support for gender equality is even stronger among younger generations. Particularly for our university the ratio of female students is very high approaching 70% of the total population of students across all disciplines. We think the UTM has much to teach to the world about gender equality.



Tunisia's aridity combined with its Mediterranean climate variability makes water a resource that is both scarce and unevenly distributed across time and space. Tunisia is one of the North African countries with the scarcest water resources. In 2020, the availability of renewable water was estimated at 359 m³/inhabitant/year, which is below the water stress threshold of 1000 m³/inhabitant/year. A recent report by the World Resources Institute (World Resources Institute, 2021) ranks Tunisia 30th out of 164 countries in terms of exposure to "high" water stress. The dominant sector in terms of consumption is agriculture with about 80%. As in most southern Mediterranean countries, agriculture is providing employment for 20 to 30% of the population, hence the importance of water-food nexus.

An innovative master's degree on water management

This is a Master project on Agricultural and hydrological Approaches to a better and sustainable development MAYA, co-funded by the Erasmus+ program involving UTM with three European universities (Sassari-Italy, Gerona-Spain, Aristote-Greece), the Union of Mediterranean Universities and two Tunisian Universities (Carthage, Sfax). UTM's contribution to this project, which covered the period October 2017- April 2021, was coordinated by Professor Béchir HAMROUNI. The master called "Integrated Water Management and Sustainable Agriculture" was developed and accredited in July 2019.

The main innovations of the master's degree

The innovation in the implementation of the master's degree called "Integrated Water Management and Sustainable Agriculture" can be summarized as follows:

- An updated needs assessment of the curricula of the involved Tunisian universities related to water and agroecosystem management has been done at project beginning.
- MAYA project proposed and promoted an innovative learning and teaching modality thanks to the use of a e-learning platform and of a Virtual Reality (VR) educational game developed on water analysis in a scientific virtual laboratory, enhancing students' cognitive capacities.



- The e-learning platform supported teachers and students in learning processes and in developing critical and analytical skills, representing also an interuniversity space where students and teachers from European Union and Tunisia worked together towards a common objective.



Training and research activities

Through its pedagogical structures and its representatives in the National Sectoral commissions on Chemistry, teaching modules have been integrated at the level of masters, licenses and engineering training. Many doctoral and master theses were defended and many papers were published in specialized journals with impact factor.

For the 2017-2021 period, the Number of publications, views and citations were respectively 61, 2373 and 701.

For example the "Desalination and Water Treatment" Research Laboratory supported 11 doctoral theses, published 5 books and 37 papers including the following in a journal whose impact factor is equal to 16,744:

“Single and simultaneous adsorption of Cr(VI) and Cu (II) on a novel Fe₃O₄/pine cones gel beads nanocomposite: Experiments, characterization and isotherms modeling

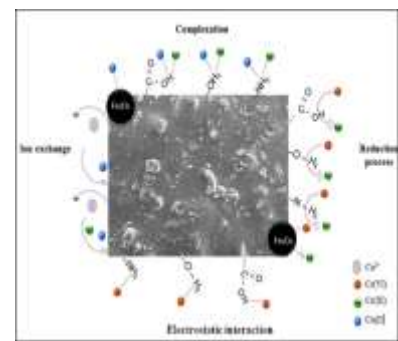
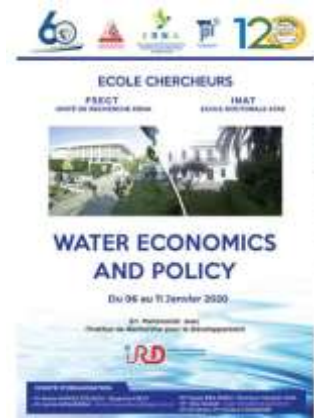
Manel Touihri, Fatma Guesmi, Chiraz Hannachi, Béchir Hamrouni, Lotfi Sellaoui, Michael Badawi, Jordi Poch, Núria Fiol.

Chemical Engineering Journal, 2021, 416, 129101”.



Organization and contribution to national and university Events

- Participation in the project to develop the vision and strategy of the water sector by 2050 for Tunisia (EAU 2050), led by the Ministry of Agriculture, Hydraulic Resources and Fisheries/ Hydraulic Planning and Balance Office (BPEH).
- Contribution to the launch of the report on the water and sanitation sector in Tunisia (The Water and Sanitation Sector in Tunisia: Baseline Report and Action Plan).
- Scientific events addressed to students, researchers and teachers are organized regularly:
 - Celebration every March 22 of each year the world Water Day by organizing face-to-face or webinar awareness conferences.
 - Workshop on water economy and policy.
 - Maghreb conference on Water Treatment and Desalination organized by the Tunisian Desalination Association in collaboration with the European Desalination Society.



First car in Tunisia working with compressed air

It is a challenge met, proving the existence of other modes of transport other than those driven by hydrocarbons or electricity. The idea is not new and co-exists with the first electric cars that appeared around the 1880s, but it was around 1920 that the coup de grace was brought by oil. We have returned to the electric car, the idea of which is more than a century old, when we have returned to such an old technology which has advantages (simplicity, little pollution, ridiculous cost) but its disadvantage is limited autonomy. Therefore we have set ourselves the goal of 40km/h for a range of 40km.

The advantages of the car which was realized as part of a graduation project at the National School of Engineers of Tunis, is its impact on the non-polluting environment because necessarily urban, its low impact on gas greenhouse effects, and energy saving. The transport cost per km is reduced by a factor of 5, and its production cost by a factor of 3. Given its simplicity, it is easily copied by more than half of the countries in the world.



République Tunisienne
 Ministère de l'Enseignement Supérieur et de la Recherche Scientifique
 Université de Tunis El Manar
 Ecole Nationale d'Ingénieurs de Tunis

ELECTRICAL ENGINEERING DEPARTMENT

End of Studies Project

Presented by
Rouslen HAMMAMI ATTOUCHI

For obtaining
National Diploma in Electrical Engineering

Design of a Pneumatic Vehicle

Project's Host
AKER Services

Project's defense

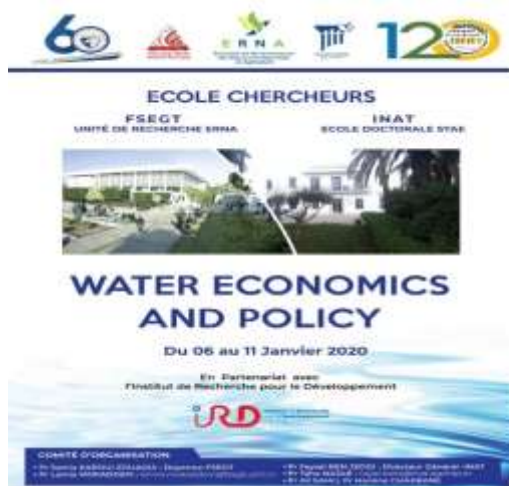
Before :

President	: Mr. Bechir RABHI, Lecturer at ENIT
Reporter	: Mr. Mohamed Melbi FILALI, Teacher-Researcher at ENIT
Host Supervisor	: Mr. Sofiane KOURDA, Engineer and CEO of AKER Services
School Supervisor	: Mr. Férid KOURDA, Professor and Director of Laboratoire de Recherche des systèmes Électriques - LSE
Guest	: Mr. Jamel BESBOUR, Professor in Mechanical Engineering

Academic Year 2019 - 2020

Events on Economics of the Environment, Natural Resources and Agriculture

The research unit "Economics of the environment, natural resources and Agriculture (ERNA)" of the Faculty of Economics and Management of Tunis, UTM and the Doctoral School "Sciences and Techniques of Agronomy and Environment (STAE) of the National Agronomic Institute of Tunisia organize a School-researchers on the theme "WATER ECONOMICS AND POLICY" from January 6 to 10, 2020, at the FSEGT and on January 11 at the INAT.



The Yabda Project

The UTM is a partner of the Yabda project. The Erasmus + Yabda Project (<https://yabda-project.eu/site/>) is launching a call for the creation of start-ups to enable project leaders to realize their ideas and make their project a success. The project "Yabda: strengthening the relationship between higher education and the economic and social environment" is approved within the framework of the European program: Erasmus

+ Higher Education - International Capacity Building. It aims to create a network of excellence in university-led entrepreneurship education in the



Maghreb region, which will address the challenges of entrepreneurship and innovation with a multiplier effect in economic growth in the Maghreb region.

Experimental Economics events

The FSEGT and UR-ERNA of the UTM organised the 1st School-researchers : "Experimental economics: empirical tools and methodology", at the FSEGT.

They invited as speakers : Pr Marc Willinger from the Center for Environmental Economics of Montpellier CEE-M), University of Montpellier 1. and HICHRI Walid: Senior Lecturer, UMR GATE Lyon-Saint Etienne - University Lyon 2

This training is intended for researchers (Economists, managers, marketing, psychologists, sociologists, biologists, etc.) and French-speaking professionals.

The University Technology Transfer Office BuTT

The University of Tunis El Manar, in collaboration with the National Agency for the Promotion of Scientific Research (ANPR), has set up an office responsible for promoting the development and transfer of research results to the socio-economic environment. economy. This Technology Transfer Office (BuTT) is defined as being an initial point of contact for structures and organizations wishing to acquire technologies and use the expertise and facilities in terms of collaboration agreements or the granting of Licence. The launch of the BuTT is part of the objective of strengthening the protection and economic exploitation of products and services based on innovation for the benefit of the social, economic and cultural development of our country.

Student Mobility in the field of Economics

As part of the Erasmus+ program funded by the European Commission, the University of Tunis El Manar is launching a call for applications from its students enrolled in the Faculty of Economics and Management of Tunis in the first year of a Master's degree in Economic Analysis and Policy to mobility grants to the University of Palermo (Italy) for the 2021-2022 academic year.



UTM-Companies Meetings

The University of Tunis El Manar organized in collaboration with the Tunisian Union of Industry, Trade and Handicrafts periodic research days "UTM-Companies Meetings"

The event aims to bring academics closer to industrialists in order to meet the concrete needs of the company by setting up joint curricular and by building joint research projects.

Decent Work: Periodic Staff Trips, Gathering and Entertainment Activities

The UTM and in partnership with the association of UTM employees have dedicated activities aiming to create a friendly, social, and inclusive environment of work. Administrative and support staff of the UTM has dedicated entertainment activities including sports, social trips, food gathering. They are also welcomed to bring with them their family and children.



The UTM administrative staff have subsidised food coupons. Higher education staff have in general an adjusted interest rate for their mortgages.

University Staff Celebrates the National Day of Traditional Tunisian Clothing

As part of the National Day of Traditional Tunisian Clothing, a fashion show was presented by the UTM administrative and support staff. The festival take place annually on the 16th of March It is an opportunity to present Tunisian products and their richness inspired by the national heritage. It's an opportunity for us to meet again and spend a good time all together by bringing out traditional clothes like the chechia, the djellaba, the koffa and the lekholkhal...



It is also a day when we celebrate our uniqueness and celebrate the beauty of our Tunisian heritage!

AI-Health Hackathon

The IA Health Hackathon was organized by the UTM in collaboration with the research laboratories LEDDRNA (FSEGT), SYSCOM (ENIT), the Tunisian Society of Telemedicine and e-health, Noccs (US), in partnership with the Digital Center of Tunisia by GIZ and the International Digital Health Forum by Réalités, July 4, 5 and 6, 2021 online.

The second part of this event was the celebration of the end of this innovation marathon within the framework of the Réalités international health forum in the presence of, Professors Fadila DARRAGI and Lamia MOKADDEM, vice-president of the UTM and the director of the LEDDRNA research laboratory (FSEGT, UTM), Pr Aziz MATRI President of the Tunisian society of telemedicine and e-Health, Pr Nouredine Bouzouaya, head of the infectious diseases department at the Mohamed Kassab National Institute of Orthopedics (La Manouba) and Professor Taieb Zahar, president of the FIR.



Boot Camp-Yabda Competition on June 3, 4 and 5 at the Cité des Sciences.

The University of Tunis El Manar Has organised the Yabda Boot Camp Competition on June 3, 4 and 5 2021 at the Cité des Sciences.

This competition was launched as part of the YABDA project. An Erasmus+ project aimed at strengthening relations between higher education and the economic and social environment as well as the entrepreneurial capabilities of students in ten partner universities with UTM in order to create a network in entrepreneurship training that will allow to meet the challenges of employability and innovation at the level of the Maghreb region.



Tunisia E-Health Challenge 4th Edition

Under the auspices of the University of Tunis El Manar, the Higher Institute of Medical Technologies of Tunis with the collaboration of the ATGBM association and in partnership with Elgazala Technopark has organized the fourth edition of Tunisia E-Health Challenge 2020.

The objective of this competition is to stimulate the entrepreneurial adventure of talented young creators of promising new biomedical and Biotech solutions, and to encourage incubators and investors to sponsor the best innovative projects in e-health.



Note that the Shell Eco-marathon is an annual competition that challenges students to design, build and drive the most energy efficient vehicles possible.

UTM-Innov Competition

We have organised a training and coaching bootcamp for participants in the competition UTM-Innov, at the City of Science in Tunis. These participants (80 candidates divided between students and young graduates) were selected from 186 applications (including 73 projects) received in February 2021.



The opening ceremony took place in the presence of the President of the University, Pr Moez CHAFRA, vice-presidents, Pr. Halima MAHJOUBI and Pr. Fadhila DARRAGI, the director of the City of Sciences of Tunis, Pr. Fethi ZAGROUBA, deans and directors of institutions of the UTM, members of the executive committee of the project PAQ-GAGE, partners of the BIAT Foundation and TICDCE as well as selected candidates and members of the "task force" of the competition.

The UTM Faced-up to the challenge of inequalities

The UTM was committed since its creation to receive the students without prior barriers and to offer them an adequate, adapted and accessible training, and also to deploy all financial and human resources to guarantee their success. A strategy to reduce social inequalities has already been implemented with the involvement of several stakeholders: Ministry of Higher Education and Scientific Research, Ministry of Health, Ministry of Social Affairs, etc.

To anchor equity functions more firmly, the UTM always seeks to fulfill its obligations to its students by carrying out several actions.



UTM Day, Barrier-Free University:

In the national level, UTM is the only university that offers two academic courses: Physiotherapy for the blind and sign language.

A Barrier-Free University Day was organized on Thursday, May 26, 2022 at the Faculty of Medicine of Tunis with the aim of allowing a better visibility of our inclusive university and to sensitize all stakeholders in the academic world to the new concept of disability by focusing their actions on the removal physical barriers, and social as well as cultural.

the Minister of Higher Education and Scientific Research Mr Moncef Boukthir, the Minister of Education Fethi Sellaouiti and the President of the University of Tunis El Manar Mr Moez Chafra were present in this event which included several conferences around: 1 Concepts of disability, legislation and the role of associative tissue in Tunisia, 2 ethical aspects of digital accessibility for people with disabilities in university, 3 Reflection around sign language, 4 Teaching Sign Language in Tunisia, 5 adaptation of digital educational programs for the visually impaired, experience of physiotherapy for the visually impaired at ESSTST, 6 reception of visually impaired students within the University: challenges and perspectives.

The second part was devoted to socio-cultural activities (the Success Story, braille workshop with interaction with the public, artistic presentations).



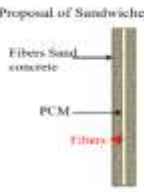









Tunis El Manar University: A city that wants to be sustainable in a city that we want it to be sustainable.

Activities and objectives

We work to develop and optimize innovative products in the field of construction with a perspective of sustainability and a circular economy strategy. The added value is manifested in the high biodegradability, the natural origin, the valorization of alternative resources, the bio-functionality, the energy saving or the technological added value.

Some results

<p>Valorization of different sands and construction and demolition waste (CDC) in hydraulic and hydrocarbon concretes. Case of marine dredging sands in compacted concrete</p>	 <p style="text-align: center;">Sands</p>
<p>Recycling of crushed brick waste in hydraulic concrete</p>	
<p>Development of new concretes incorporating Phase Change Materials (PCM)</p> <p>Proposal of Sandwiches panel</p>   	<p style="text-align: center;">URBISTIC Solutions</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>1</p> <p>New PCM based on</p> <p>↓</p> <p>Vegetable waxes and natural fibers</p>  </div> <div style="text-align: center;"> <p>2</p> <p>Recycling</p> <p>↓</p> <p>Abundant Crushing sand</p>  </div> <div style="text-align: center;"> <p>3</p> <p>Ecological sanitation</p> <p>↓</p> <p>Insulation product with natural sea fibers (Aegagropile) « Sea ball »</p>  </div> </div>
<p>Recycling of asphalt spoil (RAP) in new concrete and innovative asphalt mixes</p>	 <p style="text-align: center;">RAP</p>  <p style="text-align: center;">Waste</p>

Sustainable Food Sourcing

To ensure sustainable sourcing of food provided by university restaurants, l'UTM demands:

- The meat, poultry, fruit and vegetables provided on campus have purchased from the local legal vendors, exp. bir el kassaa market, registered at the Ministry of Commerce.
- The fish are bought from the local legal sellers registered at the Ministry of agriculture and following the legislation related to the fishing practices in Tunisia.
- The university restaurants indicate on the menu the composition of the served food.



Reducing food waste

To reduce waste, the university restaurant of Tunis El Manar campus has taken well-researched measures over all stages of the food transformation process and include improving planning and purchasing routines, reusing kitchen scraps, offering customers (teachers, students and workers) smaller portions and take-out meals and launching awareness campaigns.



Electronic waste recycling

The rapid rise in e-waste is driven by growing consumption, short product life cycles and minor repairs. Therefore, almost electronic item of different UTM institutes are being recycled on campus. Small devices, accessories and computer monitors are either repurposed by technology services or recycled for free. The recycling of white-goods (e.g. fridge) or large items (e.g. printer) are typically recharged.



Tunis El Manar University, UTM has defined a strategic line to affirm its commitment to the climate issue. We do it in a clear and determined way throughout our curricular, research and non-curricular activities.

UTM cooperate with different national and international organizations to achieve a better climate change consideration through renewable energies, green technologies and spaces, ecological transport, water management and governance.

To affirm its societal commitment, the management of the Higher Institute of Biological Sciences of Tunis, ISSBAT signed, in 2017 in front of the stakeholders, an environmental charter. It is a question of setting up a responsible management of resources to contribute to the national effort of application of the Paris agreement and the achievement of the SGD.

Source:

<http://www.utm.rnu.tn/utm/documents/Climate-sustainability12012021.pdf>

Med-EcoSuRe Project

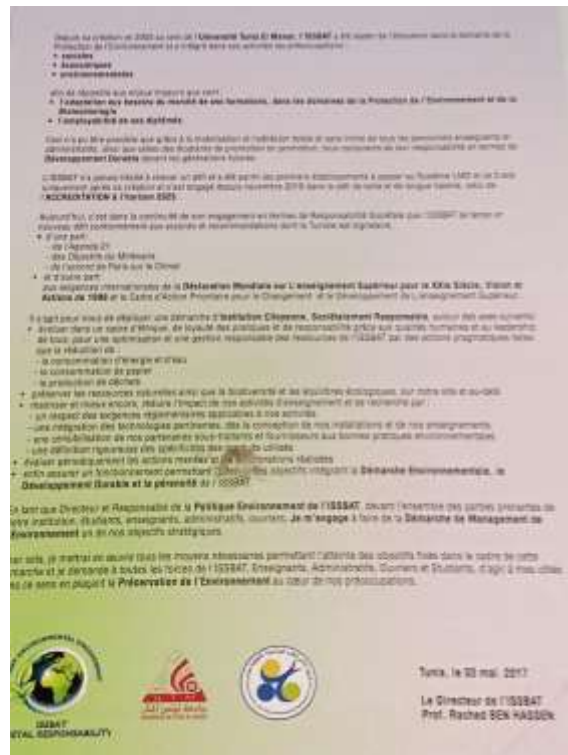
The project Med-EcoSuRe (2019-2023) offers an innovative approach to the definition and diffusion of cost-effective energy renovation within university buildings, with the perspective of extending results to the whole public buildings sector in the long term.

It's about Environmental protection, climate change, adaptation and mitigation, energy efficiency, renewable energy,



BERSOV Project

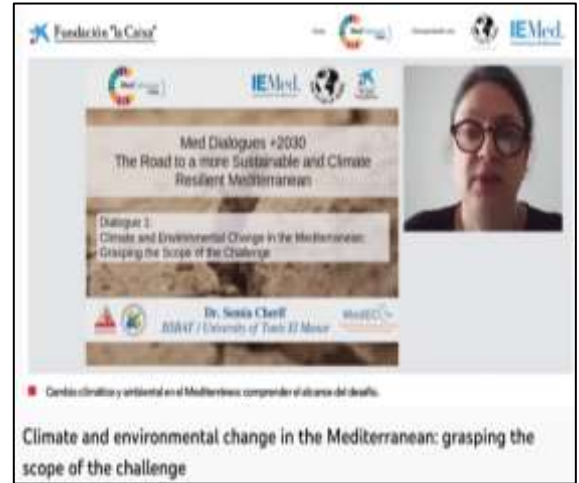
BRESOV - Breeding for resilient, efficient and sustainable organic vegetable production involves 22 partner institutions from ten European countries as well as China, Tunisia and South Korea. This is an EU_H2020 project shaping the future of organic breeding and farming in relation to climate and climate change.



MedECC Project

Dr Cherif Semia is a full professor at UTM - ISSBAT. She is part of the editorial board of the Independent Network of Mediterranean Experts on Climate and Environmental Change (MedECC). As Coordinating Leading Author, she produced the first Mediterranean Assessment Report (MAR1), which enabled her to obtain the 2020 Council of Europe North-South Prize in December 2021.

Pr Cherif Semia also presented an online conference entitled "The Road to a more Sustainable and Climate Resilient Mediterranean." within this framework of the Med Dialogue +2030 organized by the European Institute of the Mediterranean/Club of Rome/La Caixa foundation.



The Regreening Tunisia project

To raise awareness and build resilience to climate change, the Regreening Tunisia project was created in 2013 by UTM - ISSBAT in collaboration with Eco-Conscience association and the Tunisian Permaculture Association. The project is included in the course of the professional master's degree in Environmental Engineering. The partners are working together to mitigate climate change by proposing an alternative model of sustainable agricultural based on the scarcity of land and water. On bare soils, they create water-efficient edible oasis-forests in educational establishments. Regreening Tunisia was one of the nominees for the 2018 UNESCO-Japan Prize on Education for Sustainable Development. In 2021, the project runs a series of conferences to keep students, parents, teachers and the community involved and organizes days of planting fruit trees and medicinal plants with terracotta jars at Pierre de Coubertin Sports high school, Hakim Kassar middle school and ISSBAT.



Carbone Emissions Reporting

In order to integrate climate change measures into UTM – ISSBAT a first carbon emission reporting was carried out in 2021 in collaboration with the



International Center for

Environmental Technologies of Tunis (CITET) and the National Agency for Energy Management (ANME). 2 students defended their bachelor's thesis.

Waste and wastewater discharges throughout the Tunisian coastal strip and in coastal ecosystems are having negative impacts on fauna, flora as well as some human activities (fishing, aquaculture, swimming, etc.), leading to disastrous ecological, health, economic and social consequences. For examples: i) during the summer of 2021, swimming was banned by the Tunisian Ministry of Health in 17 beaches spread over 6 governorates, ii) the phenomenon of red waters on the coasts of Sfax, with excess fish mortality, noted in 2019. This later would be linked to a proliferation of marine algae.



It actually appears of great importance to analyze and understand the links between the pressure of contamination and the response of living organisms. This general problem is not only a major scientific challenge, but also an essential issue for human health and the environmental management of anthropized marine ecosystems.

This overall set of challenges was efficiently covered through a significant number of studies within the framework of research projects or research-based training (Master and PhDs thesis) in the institutions of the University of Tunis El Manar. As a result, 118 articles were published between 2017 and 2021 concerning the "Life Below Water" SDG, as detailed below.



Phenomenon of red waters on the coasts of Sfax in Southeast of Tunisia



Coastal ecosystems

The studies carried out by several researchers from the University of Tunis El Manar, in connection with the "Life Below Water" SDG, concerned mainly the Gulf of Tunis, the bay of Monastir and the Gulf of Gabès.

Gulf of Tunis

The current degradation of the coastal waters of the Gulf of Tunis, due to pollution, has a negative impact on the functioning of ecosystems, on biodiversity and on small-scale fishing. Teams from the University of Tunis El Manar, in collaboration with the National Institute of Marine Sciences and Technologies (INSTM) have conducted studies which the topics are: i) Distribution and assessment of trace metal contamination in the surface sediments of the Meliane River and the Coast of the Gulf of Tunis, ii) the impact of anthropogenic inputs on the quality of the waters and sediments of the ecosystems of the west coast of the Gulf of Tunis.



Research missions in various coasts of Tunisia



Gulf of Gabès

The Gulf of Gabès is characterized by a tidal range of up to 2m during high tides. Consequently, the possibility of dilution and dispersion of pollutants is relatively reduced and the risk of setting down to the bottom is increased. Several chemical industries are the source of various discharges, phosphogypsum in particular, which is directly discharged into the sea, impacting disastrously the marine environment. As part of training research program at the University of Tunis El Manar, a collaboration with the Tunisian Chemical Group was set up to study the impact of the compounds derived from the phosphogypsum discharge on Ghannouch–Gabes coastal ecosystem and Provide decision support tools and remediation solutions. The variations in the composition and structure of macroinvertebrate benthic communities in relationship with the marine sediment enrichment with heavy metals were also investigated in the

Gulf of Gabes.

Rades Meliane-Ezzahra coastal ecosystem,

Gulf of Tunis



Ghannouche-Gabès Coastal ecosystem, Gulf of Gabès

Monastir Bay

Monastir Bay, located on the eastern coast of Tunisia, was a few decades ago, characterized by high marine biodiversity. However, the environmental quality of this coast is affected by several urban and industrial discharges. An assessment of heavy metal contamination, total organic carbon and nutrient accumulation was performed to determine the quality of water and surface sediments.



Monastir Bay ecosystem degradation

Coastal lagoons: degradations and restoration

Lagoons are environments with high biological productivity and are essential to local economic activities (artisanal fishing and shellfish farming). They are consistently subjected to various disturbances, which involve numerous malfunctions and loss of services. In Tunisia, all coastal lagoons are subject to more or less significant disturbances caused by waste and wastewater

discharges. Only 25% of these lagoons have been restored. Researchers from the University of Tunis El Manar, within the framework of projects or the doctoral school, have carried out research works. The research focused mainly on: i) assessment of the Trophic Status and evaluation of heavy metal pollution risk in surface sediment of the South Lagoon of Tunis, ii) biogeochemical cycles of metallic trace elements and nutrients in the sediments of the Bizerte lagoon, iii) evaluation of the bioaccumulation of trace metal (Cu and Zn) in three *Orchestia* species living in Bizerte lagoon, iv) evaluation of the spatial and temporal variation of oxidative stress biomarkers, metal content and DNA damage in *Venerupis decussata*, collected from Boughrara (Southeast of Tunisia) and Ghar El Melh (Northeast Tunisia) lagoons.

The entire UTM community wants to preserve its green spaces. Together we contribute to restore and conserve terrestrial ecosystems. The National tree day is always an opportunity to be eco-friendly and learn about good citizenship and respect for earth.

The Regreening Tunisia project

In order to **fight against desertification and restore bare land and soil**, Regreening Tunisia creates Oasis-Forests. The oasis is kept as a model while introducing modifications resulting from the imitation of the forest ecosystem. To contribute to the preservation of local biodiversity, only indigenous plant species and peasant seeds that are resilient to global warming (fruit trees, medicinal plants, vegetables, and flowers) are planted. The clever mix of plants takes into account the interactions between species and contributes to the return of terrestrial insects. In 2021, in addition to the participation in the seed festival and the organization of planting days, the activities of Regreening Tunisia resulted in the defense of two students of the Professional Master in Environmental Engineering. The thesis is a contribution to education for sustainable development by creating vegetable gardens based on permaculture in universities and schools. The second thesis is a contribution to the enrichment of soils through the recovery of the organic fraction of household waste by a composting alternative adapted to urban areas.

Source:

<https://www.facebook.com/ReverdirlaTunisie>

<https://www.webmanagercenter.com/2021/09/06/472286/fete-des-semences-paysannes-creation-dun-reseau-des-agriculteurs-semenciers/>

Scientist publications on 2021

catalogue was published in the field of **sustainable management of forests**

- In collaboration with Tunisian Wildlife Association, members of UTM – FST participated to the Project Valorization of the Resources of the Khroufa Nature Reserve And The Jebel Khroufa Nature Reserve and write with co-authors the Preliminary Catalog of the Biodiversity of the Khroufa Nature Reserve – Ouechtata.

7 scientific articles were published in the field of **biodiversity and terrestrial conservation**:

- Under responsibility of Pr Karima Nasri Ammar, UTM-FST, the Diversity, Management & Conservation of Biological Systems research laboratory conduct studies on assessment of



various ecosystems and threatened species. In 2021, the laboratory team published on endemic crustacean, insect and turtles species in arid, desert and freshwater ecosystems.

- Under the supervision of Feik Errouissi, Pr associate at UTM-ISSBAT, the first data on the daily and seasonal activity patterns of *Stomoxys calcitrans* (Diptera: Muscidae) under Mediterranean semiarid climate in a dairy cattle farm in Tunisia were collected.
- Hedia Bourguiba, UTM-FST worked on endemic fruits species and published with co-authors on prunus species in the oasis agroecosystems and apricot germplasm in Tunisia.

5 scientific articles were published in the field of **restore degraded land and soil**:

- Dr Nadhem Brahim, assistant Professor UTM-FST, is interested with co-authors in enhancing soil fertility in the oasis agro system by combined Bentonite clay with organic amendments.
- Pr. Abdessatar Hatira, UTM-FST, and coauthors worked on works on the valorization of iron ore Jerissa to improve the quality of calcareous soils.



Organized activities

- 1- The establishment of a Legal Clinic at the Faculty of Law and Political Sciences of Tunis

The Clinic is primarily intended for students. It constitutes a new pedagogical method of legal education. The Law Clinic is part of the University's social responsibility approach.

Link on Facebook : <https://www.facebook.com/people/Clinique-juridique-fdspt/100057152332127/>

- 2- The organization of a study day on "democratic governance and human rights", on March 30, 2021 at the Faculty of Law and Political Sciences of Tunis. (Erasmus+ project)

- 3- As part of the Erasmus+ PACTUM project, the organization of a summer school on human rights in times of covid 19, 19-21 october 2022, 2021 at the Faculty of Law and Political Sciences of Tunis.
- 4- The organization of a round table on “new trends in the field of international investment Treaties, April 8, 2022.
- 5- The organization of the first edition of pleadings in international law (October 21 and 22, 2022)



- 6- Openness to the professional Environment
- 7- The establishment of the DEMOS research team “Democratic governance and human rights”.

This team is made up of researchers who collaborate to carry out research activities on themes related to “democratic governance and human rights”.



Democratic governance undoubtedly involves respecting and strengthening human rights. This line of work is part of the overall objective of strengthening the role of civil society in the promotion of these rights.

The specificities of this DEMOS project is to promote multidisciplinary research around human rights, and to create an active body' of teacher-researchers and students.

A master's degree entitled "Democratic Governance and Human Rights" was set up during the 2021/2022 academic year as part of a partnership agreement between the Faculty of Law and Political Sciences of Tunis (University of Tunis El Manar) and the Faculty of Legal, Political and Social Sciences of Tunis (University of Carthage).

Link :

https://fdspt.rnu.tn/useruploads/files/Master/Mastere_2022-203/Pr%C3%A9sentation-demos.pdf

The DEMOS project aimed to create this new master in a specialized academic field for the acquisition to the acquisition of practical operational skills. Quality training for future generations is a priority in order to train profiles with projects and thus develop academic skills.

Capacity building for the teaching team is planned to equip the administrative and academic staff with the methods and knowledge necessary for the success of the training.

This project aims to set up research teams in each partner university. To this end, the DEMOS research team will ensure the organization of scientific events in collaboration with the partner universities.

Training is based on public policies:

UTM has set up a research master's degree in "Science, Technology and Innovation Policy" in partnership between three institutions (ENIT & FDSPT & FSEGT).

Link :

<http://www.edsti.enit.rnu.tn/Master/Pr%C3%A9sentation%20du%20mast%C3%A8re%20STIP.pdf>

https://fdspt.rnu.tn/fra/articles/147/presentation-des-masteres-fdspt_2022-2023

The organization of a round table on "public policies: strategies and sectoral actions" Summer School as part of the PACTUM–CBHE ERASMUS+ project

Main Theme : Issues in contemporary Mediterranean democratic politics

Link:

<http://www.utm.rnu.tn/utm/fr/actualite-4443-ecole-d-ete-dans-le-cadre-du-projet-pactum-cbhe-erasmus#:~:text=Date%20%3A%2019%2F20%2F21%20octobre%202021.>

<https://pactum-project.eu/mod/page/view.php?id=63>

**Table ronde organisée dans le cadre du
mastère de recherche « Science, Technology
and Innovation Policy » (STIP) sur :**

**" POLITIQUES PUBLIQUES : STRATEGIES ET ACTIONS
SECTORIELLES »**

Le 13 décembre 2021

A la salle des conférences de la Faculté de Droit et des Sciences Politiques de Tunis

➤ **Programme :**

9h30-Allocutions d'ouverture
-M. Mustapha BEN LETAIEF, Doyen de la Faculté de Droit et des Sciences Politiques de Tunis

-M. Jelel EZZINE, Directeur du mastère STIP, fondateur et titulaire de la Chaire UNESCO sur les politiques de la science, de la technologie et de l'innovation-ENIT

10h00- Mme Kaouthar TLICHE, experte en droit de l'environnement et ancienne directrice de l'APAL : « L'évaluation des politiques environnementales en Tunisie: exemples de la gestion des déchets et du littoral ».

10h30- M. Rached CHELLY, Membre du bureau exécutif de l'UTICA : « Les politiques publiques dans le secteur de la formation professionnelle ».

11h00-Discussion

The Joint Master Degree in “Migration Studies: Governance, Policies and Cultures” between the **three Tunisian Partner Universities**: Tunis El Manar University, El Manouba University, Tunis University is MIGRANTS Projects’ main objective.

The Master Degree in Migration Studies is an **interdisciplinary two years programme offered in English** that provides students with a comprehensive understanding of the opportunities and challenges represented by international migration.

The The Master's course is offered **at the Higher Institute of Human Sciences of Tunis**.

Link: <https://migrantsproject.eu/master/about/>



Partnership for better public health.

The UTM is a strong partner of the CONFIDE Project. This project aims to establish a sustainable Public Health research center, further on referred to as Center for Evidence into Health Policy, sustained by all three Tunisian Universities involved in the project. This Center acts as a resource institution for networking between the academic and non-academic environment, providing educational modules and facilitating the implementation of student internship placements in connection to the field of Public Health evidence-based policies. Many presentations and conferences were offered as part of this project to the public and to GO and NGO organisations.

Project website: <https://confide.publichealth.ro/>



African Networks for Quality Education

Pr. Chaker ESSID of the FST has launched an African Network ITAUN (IT African University Network – ITAUN www.itaun.org) to promote quality education in Africa. This initiative intended to federate Higher Education institutions operating in the IT field in Africa, it is a platform for exchange between Africans experts, academics, students, trainees, and professionals working in the field of ICTs.



The President of the UTM, Mr. Moez Chafra and the Director of the IBLV, Mr. Imed Ben Ammar, signed onat the university headquarters a partnership agreement with the Security representatives of the Head of the State and Official Personalities for the training of its executives in foreign languages.



GEOMAG Eco-partnership

In the context of The GEOMAG project the UTM has built strong relationships with national and international organisations in relation to 4 main priorities: Environment; Engineering and related techniques; ICT; Agriculture, forestry, and fisheries. The project objective is to strengthen capacities in Geomatics applied to agriculture and the environment in Tunisia, allowing better organization of the geomatics sector, particularly about the offer of diploma training and continuing education in the sector. Agriculture and the environment. It will be essentially based on :



- The diagnosis of the existing situation,
- The assessment of needs,
- The gathering of academics,
- Support and accompaniment,
- The organization of training sessions,
- The creation of a Web Platform. AGEOS,
- civil society association to promote the field of Geospatial in Tunisia and Africa is one of the partners of the project.

Industrial Partnership for the Goals

The UTM has a strong relationship with the industrial sector in terms of collaboration for SDGs Implementation. We collaborate with many partners at the Megrine Industrial Park of Tunisia in engineering and manufacturing related projects. The UTM participate with the AZUR PACK, the SOMEF companies and the JAICA Tunisia to deploy the Japanese methodology for process optimisation Kaizen. It participates in activities launched by Azur Pack and the council of Megrine to spread the culture of environment protection and the knowledge about sustainability within the local community at the delegation of Megrine.



