

SCIENTIFIC, TECHNICAL AND ACADEMIC COOPERATION BETWEEN

TECHNOLOGICAL – EDUCATIONAL INSTITUTUTE OF WESTERN GREECE

AND

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD, INDIA

The **Technological Educational Institute of Western Greece (TEIWEST)** was created from the merger of TEI of Patras and TEI of Mesolonghi in 2013, collecting a 30-year experience as part of the public Higher Education System. It is a self-managed public body subject to federal law and under the supervision of the Ministry of Education and Religious Affairs, offering under-graduate and post-graduate programmes. TEIWEST gives emphasis on the training of staff in high quality applications which in combination with theoretical and applied scientific proficiency:

- Constitute the link between knowledge and application, developing the applied dimension of sciences and arts in corresponding professional fields.
- Transmit, utilize and promote contemporary technology, as well as, methods, practices and techniques in the field of applications.

In this framework, TEIWEST combines the development of an appropriate theoretical setting for studies with a high level of laboratory and practical training, while they conduct technological research and develop technological know-how and innovations in the corresponding professional fields.

TEIWEST central premises are located in Patras while schools and departments operate in other 5 cities throughout Western Greece Region. The facilities offered to students, professors and administrative personnel comprise of amphitheaters, classrooms, laboratories, a Computer Center, a Foreign Language Center, a sports center, students dormitories, a Library, a restaurant/coffee house, a solar power building, a conference hall and a church.

Departments that host more than 20.000 students are grouped under the Schools of:

- Management and Finance
- Sciences of Health and Welfare
- Technological Applications
- Agricultural Technology and Nutrition

TEIWEST maintains other supplementary services to the academia and society like:

- A career consultancy office
- An international relations office
- Telematic Services (e-classes, webmails, e-learning etc.)
- Practical Training Office
- Innovation and Entrepreneurship Units
- Match-making office

The institute aims to further develop plans and ideas for the benefit of the society targeting the professional development of graduates, research, innovation and connecting to socio-economic factors; that is why for over 20 years they have been implementing research and development programmes, mobility schemes (Erasmus, Leonardo Da Vinci, Socrates), research and innovation regional and national programmes and interregional cooperation programmes in diverse fields.

Dr. Babasaheb Ambedkar Marathwada University (BAMU), Aurangabad was established in 23 August 1958, gathering 60 years of experience to tender services in the domain of Public higher education. It is a NAAC accredited 'A' grade university. The BAMU, through its on-campus Departments as well as Departments running in sub-centre of Osmanabad has always nurtured a holistic and congenial atmosphere for sustained escalation in frontier level research and development in sectors of technical and economic significance. For example, Deen Dayal Upadhyay KAUSHAL Kendra (DDU-KK) has developed state-of-the-art facilities in the field of Industrial Automation and Automobile, the Department of Physics of the University has established state-of-the art platform for cutting edge research in materials science with quality research outcome, the Department of Computer Science and Information Technology has well established track record in human-machine interface, the Department of Zoology has set up a unique infrastructure for research in DNA barcoding technology, the University Department of Chemical Technology has a long record of quality research in pharmaceuticals, the Department of Botany has come up with findings truly encouraging for agricultural applications.

In accordance with a mutual desire to promote and develop activities between two institutions, namely Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and Technological-Educational Institute of Western Greece, Greece, we agree to the following statement of intent on skill based educational and research co-operation. The co-operation in specific areas may be designed by mutual consent and incorporated into specific additional agreements upon signature by the appropriate authorities of the institutions.

- 1. Two institutions agree to the following general areas of interest and co-operation:
- a. Sharing of technical infrastructure to provide skill based education.
- b. Sharing of intellectual expertise for skill oriented training both in terms of theory and hands on practice.
- c. Sharing of intellectual expertise for infrastructural set-ups, setting up of courseware and curriculum of existing and new training programme at each other's premises.
- d. Opening of joint skill based and professional academic programme leading to certificate courses, graduate and post graduate degrees by exercising each other's expertise and capabilities.
- e. probable inclusion of manpower (in terms of trainees, apprentices, regular working cadre, instructors etc.) in each other's organisation depending on scope and performance/ability of individual after well mechanised scrutiny and the employing organization will have complete discretion authority throughout the process of appointment.
- f. Dual organisation of short term training programme or workshops.
- g. Joint promotion of each other's expertise and capabilities.

Scope of Electrical Engineering Department at Technological – Educational Institute of Western Greece,

The Department's curriculum covers the knowledge and skills required by a contemporary Electrical Engineer in the areas of electrical installations, energy systems, automation, electronic, communication and information systems. Basic and specialized knowledge with emphasis on applications is offered to students so that they can understand and follow advances in technology, as well as respond promptly to problems they encounter in their careers. The Department has a clear technological orientation and its graduates, are capable of contributing to the technical and economic

development of the country. It has close links with Industry and organized sectors of the economy, as well as partnerships with other higher education institutions. It is active in the field of applied research and development and provides its graduates the opportunity to attend postgraduate specialization programs. Laboratories for education and research: Microcontrollers, communications, electronics and measurements, digital systems, control systems and signal processing, electromotive systems and programmable control (PLC), indoor electrical installations and automation, electric machines, power electronics, electrical circuits and measurements, generation, transfer and electrical energy distribution, power installations, information systems, photovoltaic systems and applications. In 2015, 5 laboratories were established, that offer services in research, development, innovations and specialized education; electronic devices, circuits and systems; microelectronics and communications; nanotechnology and advanced materials; control systems - signal processing and data acquisition; and electric energy systems. Within collaboration Electrical Engineering Department will:

- Provide faculty
- Run the equipments and course program
- Enable multidisciplinary projects for the students
- Run skill development and official recognition program
- Educate the students and staff to handle the equipments
- Train the faculty and students for creation of applied technology.

Scope of Department of Physics at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Program of Department of Physics is choice based credit system (CBCS) for M. Sc. Physics which divulges acquaintance and skills to the postgraduates. Department runs Four specializations namely Condensed Matter Physics, Nuclear Physics, Spectroscopy, Electronics. Main drive of the Department is to train students for solving career based problems and burning issues of the country. Fundamental and specialized knowledge with highlighting on applications is offered to students so that they can apprehend and pursue technological advances, equally respond swiftly to problems they come across in their careers. Department of Physics has been working effectively in the areas of Photovoltaic solar cells, thin films, light emitting diodes, supercapacitors gas sensors and energy storage device systems. The Department has a comprehensible technological orientation and its postgraduates, Ph. D. holders are enable of contributing to the technical and financial development of the country. Vision of the Department: To thrive for the truth of nature in terms of agreement of theory with practice and stand firm even if ideas fail till new notions are formed.

Physics portraits the landscape of life and this department look forward to explore the Physics lying beneath our observations. Mission of the Department: The mission of this department is to teach and learn physics in a collaborative, performance-based pathway; we look to encourage the students towards observation and analysis of the natural world and to provide the tools and skills to the students to be the torch-bearers of Physics by contributing effectively to the existing laws of nature. Department of Physics is effectively work in the field of applied research and development and opens opportunities to attend Ph. D. programs in nation or abroad. Laboratories for education and research: Advanced Materials Research, ferrites, sensor, thin films, Sensor, Molecular Spectroscopy, Nuclear Physics, and measurements, digital systems, UV-Vis spectrometer, X-ray diffractometer, Automatic Hydraulic press machine, fluorescence, atomic force microscopy, scanning electron microscopy. Within collaborations Department of Physics will:

- Provide faculty
- Run the equipments and course program
- Enable multidisciplinary projects for the students
- Run skill development and official recognition program
- Run program for industries
- Educate the students and staff to handle the equipments
- Train the faculty and students for creation of applied technology.

- 1. If any collaborative projects and/or funding proposals are undertaken, a detailed collaboration agreement will be negotiated between the two organizations.
- 2. Both the organizations agree that all financial arrangements necessary to implement this MoU or any subsequent agreement must be negotiated according to the regulation of each institution and depends on the availability of funds. Both the institutions recognize that:
- a. This MOU establishes a foundation of mutual understanding and interest and does not itself entail any financial obligations for either institutions;
- b. This MOU will take effect from the date of its signing and shall be valid for the period of five years from that date, unless terminated earlier upon six months notice by either institutions;
- c. This MOU may be revoked or modified by mutual agreement between the institutions and may be extended beyond its initial five-year term by mutual agreement.

This MoU is being signed on October 01, 2018 and will stand effective from the same date.

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