IN COLLABORATION WITH





# M.TECH IN DEFENCE TECHNOLOGY ENGINEER A LUCRATIVE CAREER IN DEFENCE



# ABOUT AMITY UNIVERSITY HARYANA

The 110 acre of Amity University Haryana campus is situated in the close vicinity of Aravali hills virtually provides experience of living in the lap of nature and creates apt environment to the students for study, learning and growth. The academic & research canvas of the University is organised into Six Faculties viz., Faculty of Management, Faculty of Arts, Faculty of Science and Technology, Faculty of Law, Faculty of Architecture and Planning and Faculty of Medical and Allied Health Sciences, which has 17 institutions offering more than 100 programmes at UG, PG and PhD level. Achieving academic excellence expresses the core philosophy of Amity University Haryana and is the driving force behind rigorous academic programmes and high quality teaching which instill a spirit of learning amongst students. The competent and dedicated faculty members are experts in their field and are strongly committed to the cause of research and innovation. Over the last few years, faculty members have published more than 300 books and 4000 research papers in high impact national and international journals.

Research Clusters in the University are deeply involved in promoting interdepartmental translational research in the areas of high national and global relevance such as Cancer Research, Lipidomics, Computational Biology, Infectious Diseases, Nano Science and Technology, Environment and Human Health, Climate Research, Agriculture and Herbal Drug Design and Technology. AUH has also established 'centres of excellence' in the areas of Agriculture, Stem Cell Research, Artificial Intelligence & Robotics, Ocean Atmospheric Science and Technology and Environment Sciences and Health to name a few. The IPR Cell of the University is highly active in promoting 'patenting culture' among faculty, students, and research scholars. The research ecosystem of the University is strongly supported by over 100 most high-tech laboratories and a Central Instrument Research Facility (CIRF) for which provides a central facility of latest and advanced analytical instrument for promoting interdisciplinary research. Amity Innovation Incubation at University is providing an ideal support platform to researchers and innovators to spinoff their research into a viable product and service.

## ABOUT AMITY EDUCATION GROUP

#### India's leading Educational Group which has

- 11 Universities & 13 Campuses in India
- 17 Campuses overseas, 28 Schools & Preschools
- 150 + Institutions, over 1200 acres of campuses
- 300+ Programmes across 60+ Disciplines in which more than 1,75,000 students are studying
- 25,000 + Research Publications in reputed journals
- 3500 + Case Studies developed and over 1550 Patents filed. Amity University has been awarded the "Top Indian Academic Institution for Patents &

Commercialization" during the National Intellectual Property Award - 2020 by Indian Intellectual Property Office under the Department for Promotion of Industry & Internal Trade (DPIIT), Ministry of Commerce & Industry, Government of India.

- 400 + Research Projects funded by Global & National Institutions
- Academic Partnerships & MoUs with 170 + premier **Foreign Universities**

#### RANKED NO.1 PRIVATE MULTI-DISCIPLINARY UNIVERSITY IN NORTH ZONE DELHI NCR

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**AMITY UNIVERSITY** HARYANA IS THE FIRST UNIVERSITY IN INDIA TO RECEIVE 'I FFD PI ATINUM CERTIFICATION. USA" AMITY SCHOOL OF **ENGINEERING &** TECHNOLOGY, GURUGRAM IS AN ACADEMIC AFFILIATE OF THE INSTITUTION OF ENGINEERING & TECHNOLOGY.



#### AMITY UNIVERSITY HARYANA IS ACCREDITED BY

ACCREDITATION SERVICE *for* INTERNATIONAL SCHOOLS COLLEGES & UNIVERSITIES



# ABOUT DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION (DRDO)

DRDO is the R&D wing of Ministry of Defence, Govt of India, with a vision to empower India with cutting-edge defence technologies and a mission to achieve self-reliance in critical defence technologies and systems, while equipping our armed forces with state-of-the-art weapon systems and equipment. Today, DRDO is a network of more than 50 laboratories which are deeply engaged in developing defence technologies covering various disciplines, like aeronautics, armaments, electronics, combat vehicles, engineering systems, instrumentation, missiles, advanced computing and simulation, special materials, naval systems, life sciences, training, information systems and agriculture. Several major projects for the development of missiles, armaments, light combat aircrafts, radars, electronic warfare systems etc are on hand and significant achievements have already been made in several such technologies



## DEFENCE MANUFACTURING SECTOR IN INDIA

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The Indian defence manufacturing industry is a significant sector for the economy. The industry is likely to accelerate with rising concerns of national security. Over the last five years, India has been ranked among the top importers of defence equipment to gain technological advantages over rival countries such as China and Pakistan. To modernise its armed forces and reduce dependency over external dependence for defence procurement, several initiatives have been taken by the government to encourage 'Make in India' activities via policy support initiatives.

India's defence manufacturing sector has been witnessing a CAGR of 3.9% between 2016 and 2020. The Indian government has set the defence production target at US\$ 25.00 billion by 2025 from US\$ 11 billion in 2019. India ranked 19th in the list of top defence exporters in the world by exporting defence products to 42 countries. Defence exports in the country witnessed strong growth in the last two years. India targets to export military hardware worth US\$ 5 billion (Rs. 35,000 crore) in the next 5 years. To increase defence manufacturing in India and make the country a reliable weapon supplier to friendly countries, the Indian government has relaxed FDI limits in September 2020 and promoting more participation from start-ups and micro, small & medium enterprises (MSMEs) in Defence Research & Development (R&D) in achieving the 'Atmanirbhar Bharat' goal. The country plans to spend US\$ 130 billion on military modernisation in the next five years and is also achieving self-reliance in defence production.

### ABOUT THE PROGRAM: M.TECH IN DEFENCE TECHNOLOGY

Defence Research Development Organisation (DRDO) has collaborated with AICTE for conducting the Regular M.Tech Course in Defence Technologies. The M.Tech in defence technology has been designed to produce Post Graduates who will have the necessary theoretical & experimental knowledge, skill and aptitude in various defence technologies areas and pursue them to carry out R&D in defence. The students will be provided valuable exposure & knowledge for various state of the art defence systems and contemporary technologies through class lectures & main thesis work. During the program, the students would be given valuable exposure by carrying out their main thesis work in DRDO labs, Defence PSUs & Private Defence Industries. This collaborative effort of DRDO, AICTE and Industries will provide required knowledge to the students and create job opportunities for them.

### **Specialisations Offered:**

- Combat Vehicle Engineering
- Aerospace Technology
- Communication Systems & Sensors
- High Energy Materials Technology
- Directed Energy Technology

#### **Program Structure:**

Semester-1	Common Courses
Semester – 2	Specialisation Courses
Semester – 3 & 4	Dissertation and industrial training



### **PROGRAM OBJECTIVES**

- To develop young aspiring engineers who have the necessary theoretical & experimental knowledge, skill and aptitude in defence technologies and systems
- To develop skilled human resource in the field of latest defense technologies
- To acquaint students for the needs of technologies related to defence & security of nation and to create zeal among students to pursue research and development for defence technologies
- To encourage, motivate and support student entrepreneurs in the defence technology domain

### PROGRAM OUTCOME

- Comprehensive understanding and knowledge in specialized subjects
- Creative thinking for innovative design and technological solutions
- Exposure to modern simulation tools & techniques
- Opportunity to get introduced to real life technology challenges
- Create specialized pool of work force for design and development of defence systems
- Contribute for self reliance in cutting edge defence technologies and products

#### UNIQUE FEATURES OF THE PROGRAM

- A unique program to foster interdisciplinary education and research-Courses aligned to the current and future needs of defence industry
- Opportunity for Team Teaching and Collaborative leaning
- Major opportunity for minor and major projects in DRDO laboratories, Defence PSUs & Private Industries-Joint supervision and high relevance of project outcome
- Great opportunity to boost Innovation and commence
  Start-ups
- High Employability-strong Defence Industry-Academia Partnership: employment opportunities in fast expanding Defence Research and Manufacturing sector (DRDO, DPSUs, Private Defence Industries & Ordinance Factories)

# EXPERIENCE A CAMPUS LIFE THAT'LL INSPIRE YOU TO DREAM BIG

- Extensive Industry Interaction with Over 1500 Corporate Leaders, Management Gurus & Distinguished International Speakers
- Eminent Scientists and Professors imbibing a Strong Culture of Research & Innovation
- Well Stocked Libraries with latest Books, Journals, Periodicals, References & Online Resources
- Amphitheatre Style Air-Conditioned Classrooms
- Wi-Fi enabled Campus with 1Gbps broadband connectivity
- Hi-Tech Labs equipped with latest infrastructure
- Secure Campus with latest IP enabled 24X7 CCTV Surveillance
- 20 Acres Sports Complex with latest amenities.
- On-Campus Departmental Store, Salon, ATM, Laundry Service, Gym & Food Courts like Café Coffee Day, Dosa Plaza etc.
- The University Provides 100% & 50% Scholarship to Meritorious Students.

For more info log on to: www.amity.edu/scholarships

#### For more details, contact:

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