

### SRM UNIVERSITY (Under Section 3 of UGC Act 1956) FACULTY OF ENGINEERING AND TECHNOLOGY SCHOOL OF MECHANICAL ENGINEERING DEPARTMENT OF AUTOMOBILE ENGINEERING



Offers

# M.TECH – AUTOMOTIVE HYBRID SYSTEMS ENGINEERING IN COLLABORATION WITH NFTDC



### About the University:

SRM University is a part of the prestigious SRM Group of educational Institutions, one of India's leading institute. The group has more than 67,000 students and over 5000 faculty members to its credit. The areas of excellence range from engineering and medicine to management and humanities. We live in an increasingly interconnected world that faces challenges and complex problems on a global scale. At the start of the 21st century, SRM University is uniquely prepared among the other universities - by its breadth of scholarship, entrepreneurial heritage and pioneering faculty - to provide research and real-world approaches to address many of the current issues. The era of globalization means many things to SRM: research on issues relating to science and technology, exchanges with foreign universities, overseas opportunities for undergraduates, and collaboration. The university embarked upon ambitious strategic initiatives to ensure that SRM continues to educate future leaders and to nd solutions to the most pressing global challenges through its International Advisory Board with eminent scholars from 40 top universities/ organizations across the world, Corporate Advisory Board with eminent executives from 250 leading companies, Faculty Abroad Program, Student Semester Abroad Program, Research Institute, Innovation in Teaching and Learning Pedagogy, and Diversity of students from 53 countries and from across India. All these led the University to be ranked as India's No.1 by The Times of India 2016 and Higher Education Review 2016. Earlier "The Education Times" (The Time of India) and Zee News. NAAC and MHRD placed SRM in "A" category. NIRF Ranking is 43.

#### About the Department:

Automobile Engineering is a branch of engineering incorporating elements of mechanical, electrical, electronic, software and safety engineering as applied to the design, manufacture and operation of motorcycles, automobiles, buses and trucks and their respective engineering subsystems. Automobile engineering offers one of the most challenging careers today. Driven by the high demand for vehicles, automobile engineers have career opportunities across the world. The course gains significance for those who are passionate about automobiles, especially since Chennai is the automobile hub of India.

### About NFTDC:

NFTDC (Non Ferrous Materials Technology Development Centre) is an autonomous and self-financing R&D institution under the aegis of Ministry of Mines, dedicated to the development of advanced materials, innovative processes on one hand and mechanical design, analysis, electronics, instrumentation and control leading to component and systems development and integration, on the other. NFTDC is a unique Technology Centre, in that it is multi-disciplinary knowledge domain based institution which enables the centre to undertake complex technology development endeavors as interdisciplinary projects involving both knowledge creation (scientific know-why) and knowledge integration (technical knowhow). NFTDC's uniqueness stems from its three genetic characteristics, namely (i) self-financing nature, (ii) multi-disciplinary all executive Human resource and (iii) R&D policy of contract / sponsored research and development oriented to needs of the user agencies.

### M.Tech Automotive Hybrid Systems Engineering:

SRM University had MoU with NFTDC in the year 2015 to assist in designing the curriculum and to promote research activities. In par with the industry need M.Tech-Automotive Hybrid Systems Engineering course started in the year 2015 to create man power in the area of Automotive Hybrid Concepts.

## Eligibility:

• B.E / B.Tech in Mechanical, Automotive Engineering, Mechatronics, Industrial & Production Engineering, Electrical& Electronics Engineering, Aerospace Engineering disciplines. Valid GATE scores would be desirable.

• Candidates with outstanding performance in B.Tech shall be considered for direct admission.

• Candidates with valid B.Tech degrees and work experience are also encouraged.

• Scientists and engineers working in NFTDC will be considered as sponsored candidates from the above disciplines as well as from other disciplines such as Electrical and Electronics, Chemical and Metallurgical engineering after sufficient R&D experience in NFTDC, i.e., with minimum experience of one year or more as Project Associate/Sr Project Associate or as Project engineer or any grade above. GATE scores are not applicable for sponsored candidates.

• Candidates can be sponsored by the industry as well, but the compulsory leave of absence has to be granted for full time programme. Furthermore, all the academic criteria has to be met by the sponsored candidates

**Please Note:** Admission will be done jointly by teams from SRMU and NFTDC. There will be written test (concepts & problems) and interview as part of admission process.

### **Fellowships:**

NFTDC shall award fellowships to outstanding candidates. Nearly 5 fellowships per year is envisaged to be awarded under this programme. The quantum of the fellowship will be decided by a committee constituted by the Director, NFTDC.

### **Course Work:**

The programme for 2 years comprises of four semesters. The semester course (including the summer semester) work is mandatory.

The first semester course work will be conducted at SRMU followed by second, third and fourth semester's course works at NFTDC.

Necessary leave of absence shall be accorded by NFTDC for attending the mandatory course work.

### Thesis Guides:

There will be one thesis guide from SRMU and one guide from NFTDC.

### **Placements:**

The students will be employment ready in areas such as (i) aerospace (ii) energy (conventional and nonconventional), (iii) automotive, (iv) biomedical and health care, (v) process engineering and (vi) environment sectors.

From amongst the graduating students, a few may be considered for projects in NFTDC for a minimum of one year and a maximum of three years as Project Associate I Senior Project Associate on completion of the programme. This will give the necessary work experience to the graduating students.

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### **Contact for Admissions:**

Director (Admissions) SRM University, SRM Nagar, Kattankulathur – 603203. Kancheepuram District, Tamilnadu. INDIA. Phone: 91-44-27455510, 91-44-27455510, 91-44-47437500, 91-44-47437500 E-Mail: director.admissions@srmuniv.ac.in, admissions.india@srmuniv.ac.in

University Website: <u>www.srmuniv.ac.in</u>

NFTDC Website: http://www.nftdc.res.in/