



## Mechanical Engineering Department, BITS Pilani, Pilani Campus

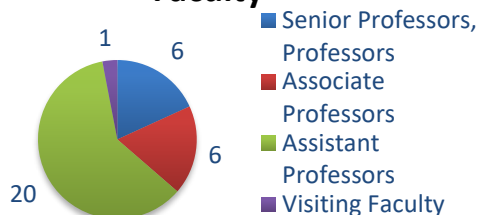
Welcomes application for Higher Degree Programs in Mechanical Engineering. The Department of Mechanical Engineering offers Master of Engineering (ME) courses in three categories: Mechanical Engineering, Design Engineering and Manufacturing Systems Engineering.

(Department Data pertaining to Calendar year 2021 only)

### ACADEMIC ACHIEVEMENTS



### Faculty

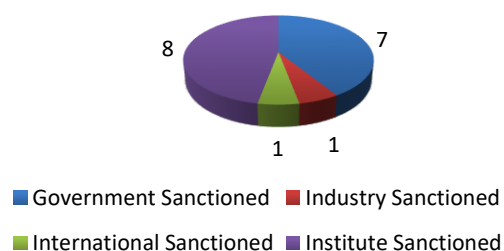


### Students intake each year (Higher Degree)

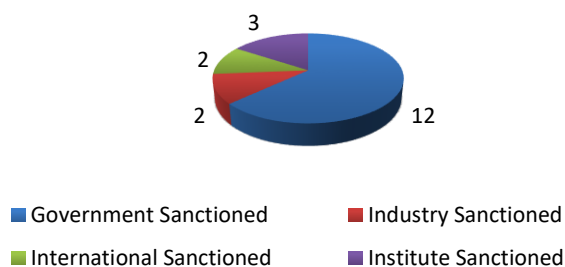
Mechanical Engineering	: 25
Design Engineering	: 25
Manufacturing Systems Engineering	: 20

- QS World Ranking: 351 – 400, QS India Ranking in top 11
- Two faculty features within top 2% scientist in subject wise ranking of Stanford University

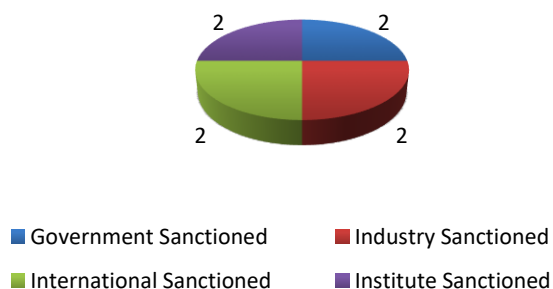
### Project Sanctioned: 350.64 Lakhs



### Projects Ongoing: 636.86 Lakhs



### Projects Completed: 305.45 Lakhs



### Department Laboratories & Room No.

Material Science Lab	2104
MEMS Lab	2111
Refrigeration Lab	2122
Thermal Science Lab	2123
Hydraulics Lab	2124
Robotics Lab	2143
Computational Lab	2233
Supply Chain Lab	2235
IC Engine Lab	4105
Smart Building Lab (Sponsored)	1103
Centralised Workshop Facility	7101

## Course Structure

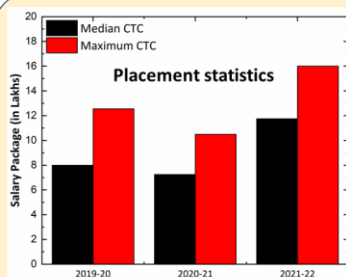
### Core courses

- Quality Control Assurance and Reliability
- Mechanism and Robotics
- Finite Element Methods
- Machine Tool Engineering
- Computer Aided Analysis and Design
- Theory of Elasticity and Plasticity

### M.E. Mechanical Engineering

### Elective courses

- Introduction to MEMS
- Tribology
- Design Projects
- Product Design
- Dynamics and Vibrations
- Micro Fluidics and its Application
- Precision Engineering
- Wind Energy
- Heating and Cooling of Buildings
- Turbomachinery
- Computational Fluid Dynamics
- Advanced Engineering Mathematics
- Advanced Heat Transfer
- Advanced Finite Element Modelling and Analysis
- Biomedical Engineering



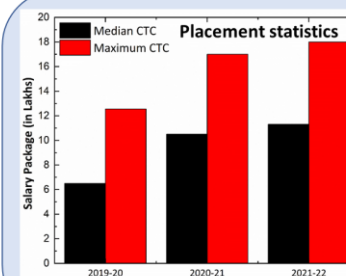
### Core courses

- Product Design
- Dynamics and Vibration
- Materials Testing and Technology
- Mechanism and Robotics
- Finite Element Methods
- Computer Aided Analysis and Design

### M.E. Design Engineering

### Elective courses

- Introduction to MEMS
- Tribology
- Fracture Mechanics
- Design Projects
- Micro Fluidics and its Application
- Computational Fluid Dynamics
- Mechanical System Design
- Machine Tool Engineering
- Advanced Engineering Mathematics
- Plastics Engineering
- Theory of Elasticity and Plasticity
- Mechatronics
- Concurrent Engineering
- Non-destructive Testing Techniques
- Advanced Composites
- Experimental Stress Analysis Techniques
- Advanced Finite Element Modelling and Analysis
- Biomedical Engineering



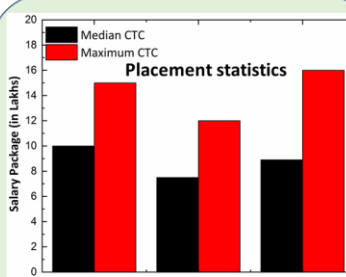
### Core courses

- Flexible Manufacturing Systems
- Supply Chain Management
- Quality Control Assurance and Reliability
- Mechanism and Robotics
- Manufacturing Planning and Control
- World Class Manufacturing

### M.E. Manufacturing Systems Engineering

### Elective courses

- Design Projects
- Product Design
- Advanced Engineering Mathematics
- Toyota Production System
- Computer Integrated Manufacturing
- Mechatronics
- Maintenance Engineering
- Leadership and Managing Change
- Concurrent Engineering
- Supply Chain Modelling and Empirical Analysis
- Computer Integrated Manufacturing (CIM)
- Biomedical Engineering





## Scholarship and Placement

100% of students receive either Fee waiver or Stipend or both.  
In final semester students can opt for Internship (PS) through the PS  
Division of the institute and earn handsome stipend along with on-the-job learning.

## Top Recruiters

DAIMLER

 HYUNDAI

**Schlumberger**

  
**TATA**  
TATA TECHNOLOGIES

**OLA**  
ELECTRIC

**Whirlpool**  
CORPORATION

 **EXIDE**



**SIEMENS**