BITS Pilani
Dubai Campus

DEPARTMENT OF MECHANICAL ENGINEERING

ME & PhD Program

Information Brochure

innovate achieve lead

ABOUT BPDC

BITS Pilani, Dubai Campus (BPDC) is among the top and pioneering institutions in Dubai, and successfully serving the student community from UAE, India and other Countries since the year 2000. It is a campus of BITS Pilani that offers Bachelor's, Master's and Doctoral programmes in Engineering and Technology. Dedicated to the field of engineering education, it is one of the largest educational institutions in Dubai International Academic City (DIAC). The institute has achieved great prominence among the region's educational institutions by adapting itself to the diverse milieu, the use of technology and modern facilities.

MECHANICAL ENGINEERING DEPARTMENT

The Mechanical Engineering Department educates the engineers of tomorrow by integrating class room theory, laboratory experiments and practical hands-on projects. It emphasizes on the process of learning and critical thinking and promotes professional relationships with other universities and industries. Mechanical Engineers learn to solve engineering problems in the area of design and manufacturing, automation, robotics and thermal fluid engineering.

SALIENT FEATURES OF PROGRAMS

- Courses offered as evening and weekend program
- Tailor-made for working professionals in UAE
- International exposure for students who are looking for jobs in UAE
- Placement assistance by the placement division
- Fresh Graduates will have opportunity to interact with working professionals
- Fully air-conditioned individual hostel accommodation provided
- Visa will be provided for international students
- Collaboration with 300+ companies to offer internship through the practice school division
- Masters program can be extended to doctoral degree
- Modular and flexible curriculum at par with international standards

TESTIMONIALS- CURRENT STUDENTS

"The best thing about the institute is being surrounded by a supportive group of people. The faculty are highly qualified, and the teaching methodology & techniques are most effective. I'm immensely proud of being part of this prestigious university."

Kariappa Machangada,
Mechanical Lead Design Coordinator, Siemens

"There aren't any akin programs to BITS Pilani's Masters program in Design Engineering. The accelerative thinking curriculum and the professors played a huge role in my choice to attend the program and pursue PhD from the same institute."

Subin Mattara, Sr. Manager- Procurements and Contracts,
Engineering Office

TESTIMONIALS- ALUMNI

"The journey for the two years was great- the environment of professors, fellow students working together, the assignments, the group studies, the practical and lab- it was fun and at the same time knowledgeable."

Pramod Netiyil, Sales Manager- Middle East & India,
Brüel & Kjær Vibro GmbH

"BITS Pilani has provided me with a chance to do research program by exploring different possibilities and choices which suits your interests. The program is designed in a such a way that it bridges the gap between academia and industry."

Dr Nandakumar Pillai, PhD.
Managing Director,
Middle East Rubber Manufacturing L.L.C

"With all latest infrastructure, facilities of labs, equipments and great support from the teachers who were flexible to the maximum extent for the students is the main highlight of the department. Great support and advice provided during my thesis had paved way for me to go for Doctoral studies and had a great impact on me during my PhD applications in international universities."

Sarath Menon, PhD Researcher
University of Bolton, UK

HIGHER DEGREE PROGRAMS (ME & PhD)

- **ME DESIGN ENGINEERING [2 YEARS]**

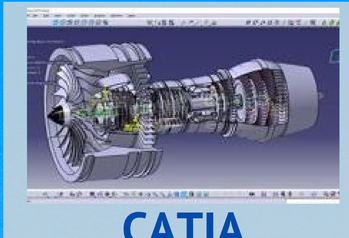
- Option 1: 12 courses (3 Sems) + Internship (1 Sem)
- Option 2: 12 courses (3 Sems) + Dissertation (1 Sem)

- **PhD [3 TO 5 YEARS]**

- Full Time: On Campus Students
- Part Time: Working Professionals in UAE
- Aspirants: Industry people with BITS Pilani liaison

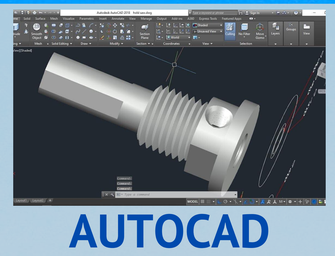
COURSE STRUCTURE (ME Design Engineering)

- ***Core courses:*** Dynamics & Vibrations, Computer Aided Analysis & Design, Finite Element Methods, Product Design, Mechanisms & Robotics, Materials Testing & Technology
- ***Electives:*** Mechatronics, Machine Tool Engineering, Computational Fluid Dynamics, Fracture Mechanics, Tribology, Non-Destructive Testing, Advanced Composites etc.
- ***Research:*** Research Practice and Dissertation or Practice School program

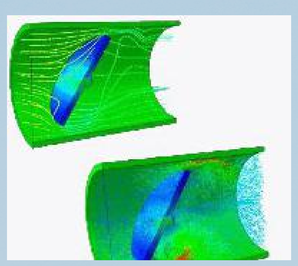


CATIA

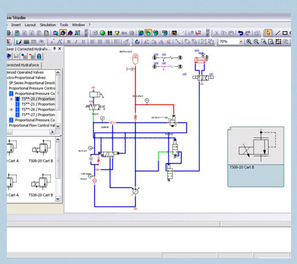
ANSYS Fluent



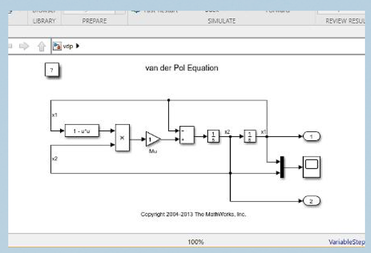
AUTOCAD



ABAQUS



Automation Studio



MATLAB Simulink

LAB FACILITIES

- CNC Lathe
- Vacuum Hot Press
- Stir Casting Furnace
- Additive Manufacturing

3D Printing

CNC Milling

- Micro Hardness Tester
- DSC & TGA
- Injection Moulding
- Composite Manufacturing

- Acoustic Emission Testing Equipment
- Potentiostat
- Tribometer
- Corrosion Testing

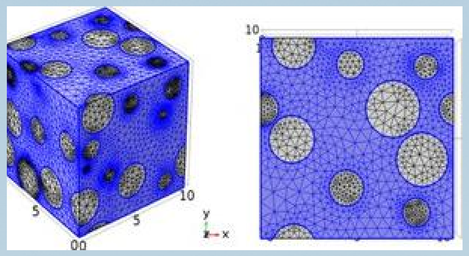
SHIMADZU Fatigue Testing Machine

Robotic Arm

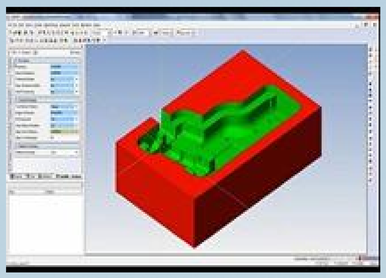
- D-space card for MATLAB real-time interface
- Universal Testing Machine
- Impact Testing Machine

- Mobile Robot with vision control
- PLC Kit
- Ultrasonic Flaw Detector
- Optical Microscope
- Wear Testing

VCR Engines (Diesel & Petrol)



Digimat



Esprit

FACULTY PROFILES

- **Prof. R. Karthikeyan, PhD**
  Research areas- *Computer Aided Engineering, Modelling, Simulation & Control, Robotics and Automation*
- **Dr. Vincent S. Kumar, PhD**
  Research areas- *Composite Materials, Cytotoxicity studies for Bio-Applications, Behaviour of Materials)*
- **Dr. Naveen Shrivastava, PhD**
  Research areas- *Fuel Cells, Renewable Energy, Fluid Flow Analysis, Energy and Exergy Analysis*
- **Dr. Gulshan Kumar, PhD**
  Research areas- *Manufacturing, Microstructure, Metal Forming, Materials Characterization, FEM simulations*
- **Prof. C Perisamy, PhD**
  Research areas- *Experimental fluid Dynamics, Turbulent Structure, Experimental Combustion studies, Renewable Energy*
- **Dr. Priyank Upadhyaya, PhD**
  Research areas- *Micromechanics of Composite Materials, Damage Mechanics, Numerical Simulations*
- **Dr. Snehaunshu Chowdhury, PhD**
  Research areas- *High pressure combustion, Laser and Optical diagnostics, Soot measurements, Flame speed measurement, IC Engine combustion,Mass spectrometry, Material characterization techniques*
- **Prof. R. Udayakumar, PhD**
  Research areas- *Renewable Energy, Automobile Engineering, Emission Control, Heat and Mass transfer*
- **Dr. Shashank Khurana, PhD**
  Research areas- *Bluff Body Aerodynamics, Bio-inspired Flow Mechanics, Vapor Absorption Refrigeration*

For more information- scan the QR code

ASME
SETTING THE STANDARD

BAEROS
TAKING YOU TO THE SKIES

ASHRAE

MEA
MECHANICAL ENGINEERING ASSOCIAT
BITS PILANI, DUBAI CAMPUS

TOP
PRIVATE UNIVERSITY
OF INDIA

INSTITUTE OF
EMINENCE
DECLARED BY MHRD, GOI

Rated 4-star by **KHDA**, Govt. of Dubai

Approved by UGC & MHRD, GOI

Leading Edge Smart Institute

State of the art Campus

Placement in top global companies

TOP
100
QS BRICS UNIVERSITY RANKING 2019

TOP
200
QS ASIA UNIVERSITY RANKING 2020

MAJOR RECRUITERS

Petrofac · EMERSON · thyssenkrupp · ETA MECHANICAL & ELECTRICAL DIVISION · Google AdWords · इंडियनऑयल IndianOil · DAIKIN · انتركويل Intercoil · GRUNDFOS

- *Full time faculty qualified with doctoral degrees*
- *Collaboration with industries and research labs*
- *Active involvement in industrial consultancy*
- *State of the art material testing and characterization lab is available*
- *Specialized training programs for industries: Design software, PLC, Hydraulics and Pneumatics, Statistical analysis, MATLAB, CNC programming and Composite materials design*

ME - PhD Admissions

2020-21

ELIGIBILITY

- Minimum requirement of 60% or 6 CGPA in B.E Mechanical Engineering or related disciplines for ME Design Engineering
- For PhD, 60% or 6 CGPA in post graduate study in Mechanical Engineering related discipline
- Interdisciplinary research is also possible.

FEE STRUCTURE

- ME - AED 15,500 per semester
- PhD - AED 2,400 per semester (full-time) & AED 3,600 per semester (part-time)
- Merit based scholarship (up to 20%) is available for ME program

HOW TO APPLY ?

- Apply online through: *www.bits-Pilani.ac.in/dubai/admissionsOverview*
- Or, scan the QR code on the left

CONTACT US

Prof. R. Karthikeyan
Head, Mechanical Engineering Department
+971 501571477, rkarthikeyan@dubai.bits-pilani.ac.in
BITS Pilani, Dubai Campus (Dubai International Academic City)
PO. Box. 345055, Dubai, UAE