

Birla Institute of Technology & Science Pilani, Rajasthan

B.E. (Hons) Manufacturing Engineering

Semester wise pattern for students admitted to First degree program - B.E. (Hons) Manufacturing:

Year	First Semester	Second Semester
1	General Biology Chemistry I Thermodynamics Mathematics I Physics I Engineering Graphics	Probability and Statistics Chemistry II Mathematics II Physics II Workshop Practice Computer Programming I
2	Electrical Sciences I Mathematics III Computer Programming II Mechanics of Solids Measurement Techniques I Technical Report Writing	Structure and Properties of Materials Electrical Sciences II Transport Phenomena I Applied Thermodynamics Measurement Techniques II
Summer	Practice School I	
3	Optimization Control Systems Design of Machine Elements Kinematics and Dynamics of Machines Metal Forming Machining Manufacturing Management	Operations Research Numerical Analysis Casting and Welding Mechatronics and Automation Computer Aided Design Tool and Fixture Design
4	Six Elective Courses	Practice School II or Dissertation

Elective Courses Offered:

Instrumentation and Control, Design of Machines Tools, Mechanical Engineering Design, Maintenance and Safety, Automotive Systems, Mechanical Vibrations and Acoustics, Manufacturing Excellence, Noise Engineering, Work System Design, Internal Combustion Engines, Lean Manufacturing, Supply Chain Management, Computer Aided Manufacturing, Quality Control Assurance and Reliability, Advances in Materials Science, Industrial Relations, Precision Engineering, Product Design and Development, Product Design and Development Projects, Project Appraisal, Special Projects.