

## Curriculum

The Curriculum of the Programme undergoes a systematic and periodic review process to ensure alignment with the Washington Accord Knowledge and Attitude Profile (WKA) and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) as defined by the National Board of Accreditation (NBA). The review process is comprehensive and involves internal and external stakeholders, thereby incorporating academic, industrial and societal expectations into the Curriculum design and evolution.

### Dhanalakshmi Srinivasan Engineering College (Autonomous) Regulations – 2023

#### PROFESSIONAL ELECTIVE COURSES: VERTICALS

Vertical I <b>Bio Engineering</b>	Vertical II <b>Medical Device Innovation and Development</b>	Vertical III <b>Management (Healthcare)</b>	Vertical IV <b>Mechanics</b>	Vertical V <b>Signal and Image Processing</b>	Vertical VI <b>Communication</b>	Vertical VII <b>Advanced Healthcare Devices</b>
Nanotechnology in medicine	Fundamentals of Healthcare Analytics	Clinical Engineering	Rehabilitation Engineering	Virtual Instrumentation for Biomedical Engineers	Communication Systems	Bio Analytic Equipments
Artificial Organs and Implants	Medical Device Design	Hospital Planning and Management	Physiological Modelling	Computer Vision	Wearable Devices	Critical Care Equipment
Biomedical Optics and Photonics	Patient safety, Standards and Ethics	Medical Waste Management	Assistive Technology	Speech and Audio Signal Processing	Body Area Networks	Human Assist Device
Neural Engineering	Medical Device Regulations	Economics and Management for Engineers	Continuum Model in Biomedical Engineering	Bio Mimetics	Virtual Reality and Augmented Reality in Healthcare	Advancements in Healthcare Technology
Principles of Tissue Engineering	Medical Innovation and Entrepreneurship	Biostatistics	Ergonomics	Brain Computer Interface and Applications	Telehealth Technology	Robotics in Medicine
Genetic Engineering	Rapid Prototyping	Forensic Science in Healthcare	Haptics	Biometrics	Medical Informatics	Therapeutic Equipments