

Course Syllabus

Course Code and Name	EE 26452 – Power Electronics
Credit and contact hours	3 (2, 1, 1) (Lecture, Tutorial, Lab)
Required or Elective	Required
Level / Year	Level (7) / Year (4)
Course Prerequisite	EE 26231 Fundamental of Electronic Devices
Textbook	M. Rashid, “Power Electronics Handbook”, 4th Ed., Butterworth-Heinemann, 2017.
Course Description	This course covers the following topics: Power Electronic Devices – Power conversion - Diode rectifiers –Thyristors – Controlled rectifiers – DC-DC converters (Choppers) – Inverters – AC-AC Converters - AC voltage controllers - Cycloconverters – Gate circuits.
Brief List of Topics to be Covered	<ol style="list-style-type: none">1- Power Electronics Devices.2- Power conversion - Diode rectifiers.3- Thyristors (construction and application).4- Controlled rectifiers – DC-DC converters.5- AC voltage controllers – Cycloconverters.6- Inverters (DC-AC converters).7- AC-AC Converters
Course is prerequisite for	<ul style="list-style-type: none">• EE26564 Electric Drive Systems