

Course Title	Electrical Installations III (Regulations)				
Course Code	ETECH 230				
Course Type	Compulsory				
Level	First Cycle				
Year / Semester	Second Year / Fall				
Teacher's Name	Yiakoumi Iacovos				
ECTS	6	Lectures / week	1 ½	Laboratories / week	1 ½
Course Purpose and Objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> • Provide knowledge on protection techniques against electric shock, overcurrent, etc • Provide students with the necessary skills and knowledge to make the most appropriate selection of equipment for an electrical installations • Introduce and discuss different arrangements of earthing and bonding • Provide guidelines and regulations for special types of electrical installation • Introduce students to test procedures and sequence of tests commonly used in electrical inspection and testing • Provide rules and regulations adopted during alteration of existing installations 				
Learning Outcomes	<p>After completion of the course students are expected to:</p> <ul style="list-style-type: none"> • Be familiar with protection techniques against electrical situations • Select the most appropriate equipment for a given electrical installation • Provide the best earthing arrangement for a given electrical installation • Test and inspect an electrical installation • Know the proper procedures when altering an existing electrical installation 				
Prerequisites	None	Required	None		
Course Content	<ul style="list-style-type: none"> • Protection for safety (against electric shock, thermal effects, overcurrent, overvoltage, undervoltage, etc) • Selection and erection of equipment and wiring systems • Switchgear for protection, isolation, and switching • Earthing arrangements and protective conductors • Isolation and switching • Special installations (e.g. bath, swimming pool, caravans, etc) • Construction site installations • Installations at agricultural and horticultural premises • Installation of power supplies and lighting fixture in highways • Electrical inspection and testing (test procedures, sequence of tests) • Alterations and addition to an existing installation • Periodic inspection 				

Teaching Methodology	Lectures, in-class examples, exercises, practical.
Bibliography	<p><u>Compulsory</u></p> <ul style="list-style-type: none"> • Requirements for Electrical Installations: IEE Wiring regulations (16th Edition) (2004), IEE (British Standard), IEE, ISBN: 0 86341 373 0 • On-Site Guide (BS 7671:2001) Wiring Regulations 16th Edition (2004), IEE (British Standard), IEE, ISBN: 0 86341 374 9 • Lecturers notes.
Assessment	<p>Homework: 10%</p> <p>Participation: 10%</p> <p>Laboratory: 20%</p> <p>Mid Term: 20%</p> <p>Final Exam: 40%</p>
Language	Greek