

Course Title	Electrical Installations I (Basic Principles)				
Course Code	ETECH 120				
Course Type	Compulsory				
Level	First Cycle				
Year / Semester	First Year / Spring				
Teacher's Name	Iakovos Yiakoumi				
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 students the basic skills and abilities needed to organize a productive work environment• Introduce students to the basic tools and equipment commonly used in electrical installations• Provide basic knowledge on the types of electrical systems• Equip students with basic knowledge and practical experience on wiring different types of systems• Provide understanding on fault protection techniques• Introduce students to the techniques for inspection and testing of an installation				
Learning Outcomes	<p>After completion of the course students are expected to:</p> <ul style="list-style-type: none">• Know basic scientific concepts involved in electrotechnology• Have a basic knowledge on the types of electrical systems used in typical electrical installations• Know how to properly wire electrical systems for different applications• Perform fault protection techniques in single and three-phase electrical systems• Perform electrical installation at special locations• Know how to properly inspect and test an electrical installation				
Prerequisites	None		Required	None	
Course Content	<ul style="list-style-type: none">• Basic electrotechnical units and theory• Basic scientific concepts in electrotechnology• Basic electrical units and cables• Tools and equipment• Alternating current and electrical machines• Polyphase or three-phase electrical systems• Overcurrent, short circuits and earth fault protection• Electricity supply systems• Electrical installations and wiring systems (for lighting, fire alarms, intruder alarms, closed circuit television, etc)				

	<ul style="list-style-type: none"> • Electrical installation at special locations (e.g. bath, shower rooms, caravans, etc) • Inspection and testing techniques
Teaching Methodology	Lectures, in-class examples, exercises, practical.
Bibliography	<u>Compulsory</u> <ul style="list-style-type: none"> • Basic Electrical Installation Work (2011), Trevor Linsley, Newnes, ELSEVIER, 6th Edition, ISBN: 978 0 08 096628 1 • Lecturers notes.
Assessment	Homework: 10% Participation: 10% Laboratory: 20% Mid Term: 20% Final Exam: 40%
Language	Greek