



## Electronic Engineering / IESTI

Curricular structure 0852015

### 1st Semester

Code	Discipline Name	Credit Hours
BAC002	Communication and Expression Skills	64 h
ECOP01	Programming Techniques	32 h
ECOP11	Programming Techniques - Laboratory	32 h
ELT101	Scientific and Technological Methodology	32 h
MAT001	Calculus I	96 h
MAT011	Analytical Geometry and Linear Algebra	64 h
QUI102	General Chemistry	64 h
QUI112	General Chemistry - Laboratory	16 h

### 2nd Semester

Code	Discipline Name	Credit Hours
DES201	Basic Technical Drawing	64 h
ECOP04	Embedded Programming	32 h
ECOP14	Embedded Programming - Laboratory	32 h
EEL105	Electric Circuits I	48 h
EEL115	Electric Circuits I - Laboratory	16 h
ELTA00	Introduction to Analog Electronics	32 h
ELTA10	Introduction to Analogue Electronics - Laboratory	16 h
FIS203	Physics I	64 h
FIS213	Physics I - Laboratory	16 h
MAT002	Calculus II	64 h

### 3rd Semester

Code	Discipline Name	Credit Hours
EEL106	Electric Circuits II	32 h
EEL116	Electric Circuits II - Laboratory	16 h
ELTA01	Analog Electronics I	48 h
ELTA11	Analog Electronics I - Laboratory	16 h
ELTD01	Digital Electronics I	48 h
ELTD11	Digital Electronics I - Laboratory	16 h
EME311	Solid Mechanics	64 h
MAT003	Calculus III	64 h
MAT021	Differential Equations I	64 h

**4th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
ELE401	Magnetic Circuits	48 h
ELE402	Polyphase Circuits	48 h
ELTA02	Analog Electronics II	48 h
ELTA12	Analog Electronics II - Laboratory	16 h
ELTD02	Digital Electronics II	32 h
ELTD12	Digital Electronics II - Laboratory	16 h
EME205	Transport Phenomena	64 h
FIS403	Physics III	64 h
FIS413	Physics III - Laboratory	16 h
MAT022	Differential Equations II	64 h

**5th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
EEL305	Electric Machines	64 h
EEL315	Electric Machines - Laboratory	16 h
ELTA03	Data Acquisition and Conversion	32 h
ELTA13	Data Acquisition and Conversion - Laboratory	32 h
ELTD03	Microprocessors and Microcontrollers	32 h
ELTD13	Microprocessors and Microcontrollers - Laboratory	32 h
FIS503	Physics IV	64 h
FIS513	Physics IV - Laboratory	16 h
MAT012	Numerical Calculus	64 h
PBLE01	Project Based Learning I	64 h

**6th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
ECAC01	Modelling of Dynamic Systems	64 h
ECAC11	Introduction to Signal Analysis	16 h
ECAT01	Instrumentation	32 h
ECAT11	Instrumentation - Laboratory	16 h
ELTD05	Digital Systems Design	32 h
ELTD15	Digital Systems Design - Laboratory	32 h
ELTP01	Power Electronics and Controlled Drives	64 h
ELTP11	Power Electronics and Controlled Drives - Laboratory	16 h
FIS502	Electromagnetism	64 h
PBLE02	Project Based Learning II	64 h
COM933	Human Factors and Usability Engineering	48 h

**7th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
ECAC02	Classical Control	64 h
ECAC12	Classical Control - Laboratory	16 h
ECOS03	Embedded Operating System	32 h
ECOS13	Embedded Operating System - Laboratory	16 h
EEL604	Transients	48 h
ELTA04	Electronic Devices Modelling	32 h
ELTP02	Electronic Power Converters	32 h
ELTP12	Electronic Power Converters - Laboratory	16 h
MAT013	Probability and Statistics	64 h
PBLE03	Project Based Learning III	64 h
TELC01	Analog Communication Systems I	32 h
TELC11	Analog Communication Systems I - Laboratory	16 h

#### **8th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
ECAC04	Digital Signal Processing	32 h
ECAC14	Digital Signal Processing - Laboratory	16 h
EEL046	Electrical Installations	32 h
ELT047	Project Management	48 h
ELT052	Electrical and Electronic Materials	32 h
ELTA05	Electromagnetic Compatibility	48 h
ELTP03	Switched-Mode Power Supplies	32 h
ELTP13	Switched-Mode Power Supplies - Laboratory	16 h
PBLE04	Project Based Learning IV	64 h
TELC02	Digital Communication Systems	32 h
TELC03	Computer Networks	32 h
TELC12	Digital Communication Systems - Laboratory	32 h
TELC13	Computer Networks - Laboratory	16 h

#### **9th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
EAM002	Environmental Sciences	64 h
ECN001	Economics	48 h
EPR001	Engineering Economics	48 h
EPR002	Industrial Organization and Management	48 h
SOC002	Social Sciences and Humanities	48 h

#### **10th Semester**

<b>Code</b>	<b>Discipline Name</b>	<b>Credit Hours</b>
ESTSUPERV_085_300	Supervised Internship	327 h
PROJETOFINAL_085_150	Final Paper	150 h

**Note:** There are optional disciplines that are not listed here and may be available for attendance. Please contact us for further information.