

International Engineering - Electrical Engineering

1. UND 2. SEMESTER
GRUNDSTUDIUM

Grundgebiete der
Elektrotechnik I und II

Elektronik I und II

Mathematik I und II

Physik

Einführung in die Informatik

Programmieren in C++

Grundlagen der
Betriebswirtschaft

3. UND 4. SEMESTER
HAUPTSTUDIUM

Elektrische und magnetische Felder

Signale und Systeme

FPGA-Design

Interkulturelle Kompetenzen

Spanisch für Ingenieurwissenschaften &
Kultur Lateinamerikas I und II

Mess- und Sensortechnik

Mikroprozessortechnik

Spezialisierung:
**EA = Energie- und
Automatisierungs-
technik**

Regelungstechnik I

Elektrische
Maschinen

Steuerungstechnik

Elektrotechnische
Systeme

Spezialisierung:
**IT = Informations-
technik**

Nachrichtenübertra-
gungstechnik I

VHDL-Synthese

Digitale Signalver-
arbeitung

Kommunikations-
systeme I

5. UND 6. SEMESTER
HAUPTSTUDIUM IM AUSLAND IN LANDESSPRACHE

MODULE AN DER UPB IN KOLUMBIEN

EA:

- Lab. of Electronic Circuits
- Power Electronics
- Logic Control PLC
- Embedded System Design
- Communication Systems (+laboratory)
- Digital Systems Design
- Research Methodology
- Professional Context
- Industrial Control (+laboratory)
- Power Electronics (+laboratory)
- Advanced Electronic Design
- Elective, Option PDP I, II, III and IV
- Professional Ethics

IT:

- Transmission Lines and Electric Substations
- Electric Machines II (+laboratory)
- Logic Control PLC
- Research Methodology
- Analysis of Power Systems I
- High Voltage
- New Technologies in Electrical Engineering
- Professional Context
- Power Generation Systems
- Electric Market and Legislation
- Analysis of Power Systems II
- Elective, Option PDD I, II and III
- Professional Ethics

MODULE AN DER USACH IN CHILE

EA:

- Industrial Control and Drives
- Distribution and use of electrical energy
- Industrial electronics (Level 6)
- Electric Power Systems
- Solar and wind generation
- Business Plan
- Thermal and hydraulic systems
- Electrical Engineering Project
- Protection and maintenance of Electr. Systems
- Management and Entrepreneurship
- Thesis work
- Project workshop

IT:

- Telecommunications II
- Programming for electr. Eng.
- Electrical Machines
- Electronics
- Development course
- Entrepreneurial business plan
- Industrial electronics
- Fiber-optic communication
- Design of telecommunication
- Network design
- IoT communication networks

7. SEMESTER

Praktikum/
Studium &
Bachelor-
arbeit im
Ausland