

ETcTI | TAUGHT IN ENGLISH

MASTER IN AUTOMOTIVE ELECTRONIC SYSTEMS

Engineer the "Brain" of Tomorrow's Vehicles

THE REVOLUTION IS CODE & SILICON

The era of purely mechanical cars is over. The future belongs to automated driving, smart sensors, and green energy management.

Don't just watch the industry evolve. **Be the engineer who builds the architecture.**



| THE AUTOMOTIVE HUB

€100K+

Annual Research Funds

AN ELITE NETWORK

We partner with the giants of the West Romania automotive cluster. You will be recruited by the companies funding our labs:

AUMOVIO · SCHAEFFLER · HELLA · FLEX ·
VALEO · YAZAKI · MAGNA · HONEYWELL ·
ELBA · TRW

PICK YOUR FUTURE TITLE

HARDWARE & POWER DESIGN

Design the physical architecture that powers electric and autonomous mobility.

-  Hardware Eng. for Energy Mgmt
-  PCB Layout Engineer
-  Functional Safety Expert

SOFTWARE & SYSTEMS VALIDATION

Write the algorithms and rigorously test the logic that keeps passengers safe.

-  Autonomous Driving Developer
-  Model-Based Test Engineer
-  System Architect

THE ARCHITECTURE YEAR 1

Core Systems, Sensors, and
Foundations.

YEAR 1 / SEMESTER 1

Type	Discipline (Taught in English)
CORE	High Performance Computing, Memories and Smart Sensors
CORE	Reliability and Functional Safety Elements of Auto. Electronic Systems
CORE	Advances in Power Electronics Design
CORE	Academic Ethics and Integrity
OPT 1	Deep Neural Networks / Car to Car Communication / Design and Research Methodology
PRAC	Research Practice 1

YEAR 1 / SEMESTER 2

Type	Discipline (Taught in English)
CORE	Automotive Systems Modelling and Design
CORE	Thermal Design and Techniques to Minimize Disruptive Effects
CORE	Automotive Communication Protocols
OPT 2	Quality Management in Automotive Industry / Machine Learning / Architectures for Intelligent Data Processing
PRAC	Research Practice 2

THE ARCHITECTURE

YEAR 2

Advanced Control, Specialization, and
Dissertation.

YEAR 2 / SEMESTER 3 & 4

Sem / Type	Discipline (Taught in English)
S3 / CORE	Digital Control of Electronic Power Converters
S3 / CORE	Testing Techniques in the Development of Automotive Products
S3 / OPT 3	Low Power Electronic Systems / Modern Programming Techniques
S3 / OPT 4	Elements of Artificial Intelligence / Optimization of Electronic Products for Series Production
S3 / PRAC	Research Practice 3
S4 / PRAC	Research Practice 4
S4 / CORE	Dissertation Thesis Preparation
S4 / EXAM	Dissertation Exam

MEET YOUR MENTORS

Learn directly from industry veterans and specialized academic experts.

PROFESSORIAL LEADERSHIP

PROF.DR.ING. CĂTĂLIN CĂLEANU

Deep Neural Networks

PROF.DR.ING. DAN LASCU

Advances in Power Electronics Design
Automotive Systems Modelling

PROF.DR.ING. AUREL GONTEAN

High Performance Computing
Modern Programming Techniques

PROF.DR.ING. RADU VASIU

Design and Research Methodology

ADVANCED TECHNOLOGIES MENTORS

- ✍ **Conf.dr.ing. Ioan Lie**
Testing Techniques for Automotive Products
- ⚡ **Conf.dr.ing. Adrian Popovici**
Digital Control / Low Power Systems
- </> **SL.dr.ing. Marina-Adriana Mercioni**
Machine Learning \ Elements of Artificial Intelligence
- 📡 **SL.dr.ing. Septimiu Lica**
Thermal Design and Techniques to Minimize Disruptive Effects
- ⚖ **Conf.dr.ing. Ioan Jivȃț**
High Performance Computing



SPECIALIZED DOMAIN LEADERS

🔧 **Șl.dr.ing. Valentin Maranescu**

Automotive Communication Protocols / Quality Mgmt

🏠 **Șl.dr.ing. Adrian Avram**

Optimization of Electronic Products

🛡️ **Dr.ing. Florin Berinde**

Reliability & Functional Safety Elements

⚖️ **Șl.dr. Sorin Suci**

Academic Ethics and Integrity



READY TO ACCELERATE?

Enroll in the Master in Automotive Electronic Systems today.



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www.etc.upt.ro