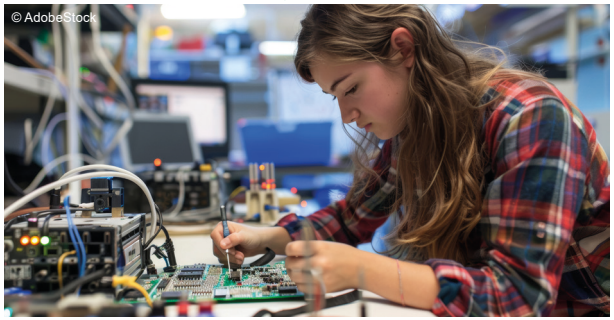
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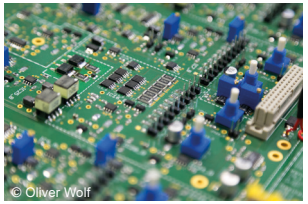
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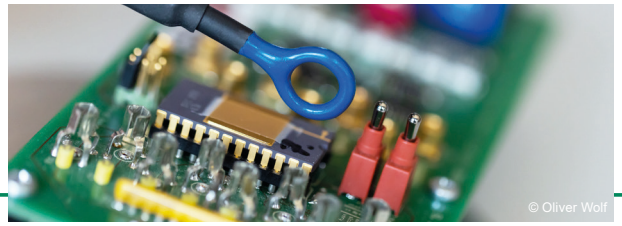
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About the project

The "GreenChips-EDU" project aims to enhance microelectronics education in Europe, addressing the need for skilled professionals in the semiconductor industry.

The project, involving European universities and industry partners, seeks to develop a joint European education program focusing on sustainable microelectronics.

Key objectives include creating dual degree programs and lifelong learning modules, emphasizing online and hybrid learning formats.

More information on the Green Electronics Certificate can be found on

greenchips-edu.eu

and on

ife.tugraz.at

Co-funded by the European Union

FFG
Promoting Innovation.

GreenChips-EDU
Educate for a Sustainable Tomorrow

Green Electronics Certificate

An initiative by the EU-funded project GreenChips-EDU


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The Green Electronics Certificate from TU Graz includes a selection of courses designed to equip students with critical expertise in sustainable, energy-efficient technologies.

With a catalogue encompassing the:

- Basics of Microelectronics
- IC Design Fundamentals
- Electromagnetic Compatibility
- Analog IC Design
- Power-Aware Computing
- RF and Microwave Engineering

Your skills will be needed

to build and design advanced chips, aligned with the EU's priorities set forth in the Chips Act.

Part of TU Graz's Masters' in Electrical Engineering,

this certificate responds to the rising global need for sustainable microelectronics, addressing key issues such as energy efficiency and hardware sustainability.

The selected courses are taught by

distinguished TU Graz professors and top industry professionals, providing students with high-quality support and industry-relevant insights.

Green Electronics Course List

Courses	Type	ECTS
439.004 Basics of Microelectronics	L	3
439.040 Development of Electronic Systems	L	6
439.072 IC Design Fundamentals	L	3
439.073 IC Design Fundamentals	PE	3
439.096 Electromagnetic Compatibility of Electronic Systems	L	3
439.097 Electromagnetic Compatibility of Electronic Systems, Laboratory	P	1,5
439.210 Electromagnetic Compatibility of ICs	L	1,5
439.229 Electromagnetic Compatibility of ICs, Laboratory	P	1,5
439.213 Production Test and Design for Test	L	3
439.205 Advanced Analog IC Design 1	LP	4,5
439.225 Advanced Analog IC Design 2	LP	4,5
439.228 Reliable Integrated Circuits in Design and Application	L	1,5
439.230 Selected Topics of Advanced Analog IC Design	L	3
439.220 Smart Power and High Voltage Circuits	L	3
448.024 Processor Architecture	L	3
448.025 Processor Architecture, Laboratory	P	1,5
448.029 Microcontroller Design, Laboratory	P	6
448.064 Power-Aware Computing	LP	3
448.065 Power-Aware Computing, Laboratory	P	1,5
451.XXX Wireless Power Technologies for Sustainable Electronics	L	3
451.100 Fundamentals of RF & Microwave Engineering	L	3
451.101 Fundamentals of RF & Microwave Engineering	PE	1,5
451.200 RF System Design	L	3
451.201 RF System Design	PE	1,5
451.004 Guided Waves and Passive Components	L	3
451.005 Guided Waves and Passive Components	PE	1,5

How to get your **Green Electronics** Certificate?

The "**Green Electronics Certificate**" can be earned in the Master's programs "**Electrical Engineering**" and "**Information & Computer Engineering**". To qualify for certification, students are required to accumulate a minimum of 25 ECTS credits, based on the Green Electronics course list, starting in winter semester 2024/25.

After completing the required ECTS from the course list, please contact the **IFE Team**. They will verify your ECTS and issue your certificate accordingly.

IFE Team

Institute of Electronics (IFE) - TU Graz
Head of Institute: Prof. Bernd Deutschmann
Secretary Team: Claudia Cargel & Kathrin Autischer
Email: sek.ife@tugraz.at

GreenChips-EDU
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