

Microwave Engineering & Antennas

This micro-credential is designed for: professionals/life-long-learners

Subject area: Electrical Engineering

University: TU/e

Prerequisites: Bachelor-level background (or equivalent) in circuits and electromagnetics are required.

Teaching mode: online, both synchronous and asynchronous

Instructor(s): Bart Smolders, Ulf Johanssen

Costs: €2,000

Description

This microcredential course, combines know-how on passive and active microwave circuits as well as antenna systems. Future applications, like mm-wave 5G/beyond-5G wireless communications or automotive radar, require experts that can co-design highly integrated antenna systems that include both antennas and microwave electronics. This course will provide you with the required theoretical foundation as well as hands-on experience using state-of-the-art design tools, supported by online lectures.

Learning outcomes

At the end of the course the student/professional will have introduction level knowledge on microwave engineering, including passive components, and active circuits (amplifiers) as well as on antenna systems. The student/professional will be able to use design tools (ADS/QUCS) to finish a design challenge.

General information

Contact hours per week: 4 hours

Total workload: 140 (in hours for the whole course)

ECTS credits: 5

Course start date: 14/11/2022

Course end date: 05/02/2023

Weekly teaching day/time: tuesdays 15.30-17.30, thursdays 10.45-12.45

Time zone: CET (Denmark, Germany, France, Netherlands, Switzerland, Czech Republic)

Further information:

Activities and methods: Lectures, Lab work, Online videos, Self-study, Practices, Exercises

Presence on campus:

Final examination

Form: tbd

Date:

Location/format: online

Add. info/requirements:

Registration

Registration opening date:

Registration closing date: 10/11/2022

To register for this micro-credential, follow the registration requirements of the corresponding university as specified here (“How do I sign up”): www.euroteq.eu/microcredentials-registration.

Administration

Number of places:

Minimum participants:

Contact: h.donaldson@tue.nl

Internal course code:

This course is a micro-credential developed by EuroTeQ Engineering University, a collaborative activity of the partner universities DTU, L’X, TU/e, TalTech, CTU and TUM. It is the responsibility of the participant to check if you fulfil the requirements to participate in a specific course, as specified in the description. When the course is completed successfully, participants will be awarded the EuroTeQ micro-credential, evidencing the learning outcomes. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.