

Academic Course FSA – Launch

FSA – FUNCTIONAL SAFETY FOR AUTOMOTIVE



- > Are you interested in engineering for autonomous driving? SAFETY will be indispensable!
- > Would you like to see how experts deal with the different topics of automotive engineering, taking SAFETY into account? Become an Academic Safety Engineer and enrol in this academic course TODAY!
- > Do you like to profit from an international teaching and research network?
This academic course on Functional Safety for Automotive is just right for you!
- > Would you like to take up an international study? Come and study with us in Vienna, Budapest, ZalaZONE, and in online sessions from home!
- > Do you value using your teaching content directly in practical applications?
Experience the real world at our automotive proving ground in ZalaZONE!

For a new kind of curriculum, the Academic Course “*Functional Safety for Automotive*” (FSA), the University of Applied Sciences Vienna together with the Technical University Budapest have joined forces and expertise to develop lectures to educate safety experts for automotive industry. Following the guiding principle of research-led teaching, expertise from safety research projects and the automotive sector is directly transferred into the teaching by the experts of both institutions. Comprehensive, systematic, and practical education at an academic level is provided to students enrolled in this academic course. Special focus is put on application and interpretation of ISO 26262. The theoretical background taught in this course is put to practise by means of a practical project, from planning to realistic hands-on tests at the ZalaZONE Proving Ground of the TU Budapest.

The result is an unique and practical academic education!

FSA at one glance:

Study duration 2 Semesters	Language of tuition English	60 ECTS	Organisational form extra-occupational, hybrid schedule
Degree Academic Safety Engineer	20 student places	Schedule weekly 2d online & 4 presence weeks	

SEMESTER 1
COURSE 1 Safety Basics
1.1.1 Introduction to System Safety and Functional Safety
1.1.2 Systems Engineering
1.1.3 Introduction to Safety Analysis Methods
1.1.4 Fault Tolerant Systems
COURSE 2 Standards
1.2.1 Quality and Process Management with Focus on ASPICE and ISO9001
1.2.2 Project Management for Safety Projects
1.2.3 ISO 26262 Automotive Safety Standard
1.2.4 Safety beyond Standards
COURSE 3 Concept
1.3.1 Requirements Engineering with Focus on FSC
1.3.2 System Design with Focus on TSC
1.3.3 Application of Safety Methods
1.3.4 Test Management and Engineering

SEMESTER 2
COURSE 4 Design
2.4.1 Formal Methods for Safety Critical Areas
2.4.2 Model based Safety and Systems Engineering
2.4.3 Practical Project
2.4.4 Cyber Security Foundations
COURSE 5 Realisation Verification
2.5.1 Safety-related Technical Solutions
2.5.2 Automotive Technologies
2.5.3 Test Execution and Validation
2.5.4 Practical Application of a Project
2.5.5 Cyber Security Application
COURSE 6 Final Scientific Paper
2.6.1 Final Scientific Paper Proposal
2.6.2 Final Scientific Paper

Academic Course Organisation

- > The lectures are organised in a hybrid form:
 - > The main part of the lectures is scheduled weekly online Tue & Wed
 - > Additionally, 4 weeks with presence lectures are arranged over the year
 - > 2 weeks in Vienna
 - > 1 week in Budapest
 - > 1 week at ZalaZONE
- > The final work will be in form of a scientific paper, for which sufficient time is reserved in the 2nd semester
- > The experts from VISSE and TU Budapest are also lecturers in this new Functional Safety for Automotive (FSA) course
- > Both universities have gathered substantial expertise in successful online teaching

ONLINE COURSE APPLICATION VIA: <https://bewerb.fh-campuswien.ac.at/>

Join our online info-session on Tuesday, January 25th, 17:00-18:00 CET!

Zoom info-session link: <https://fh-campuswien.zoom.us/j/96654342175>