



**Exchange Programmes Fall semester 2022/2023 in Engineering offered by  
Fontys University of Applied Sciences  
Eindhoven, The Netherlands**

Fontys University of Applied Sciences is a conglomerate of institutes of higher university education. It has more than 36,000 students. Fontys stands for craftsmanship, the ultimate combination of theory and practical experience. Fontys offers more than 200 bachelor and master programs at higher professional education level, in various sectors.

**Location Eindhoven**

The English courses Engineering are situated within the modern education complex in Eindhoven, a suburban city in the South of the Netherlands and gateway to Europe. Eindhoven can easily be reached by car, has its own airport and of course a railway system. Eindhoven Brainport with its High Tech Campus is developing into an international paradise for innovative research. High tech companies like Philips, ASML, VanderLande, NXP, DAF and many more are home-based in the region of Eindhoven, the Silicon Valley of the Netherlands.

**Information on the Programs**

- Exchange semester has a maximum study load of 30 credits (EC).  
1 credit has a workload of 28 hours.
- It is possible to choose less credits in consultation with the home university
- Some programs are scheduled with reservation of sufficient applications
- **It is NOT possible to mix modules from different programs.**

**Application procedure**

Please visit our website  
<http://fontys.edu/Short-term->

[programmes/Exchange-programmes/Engineering.htm](#)

**Accommodation**

Fontys University will support international Exchange students who need help in finding accommodation.

**Admission requirements**

We rely on our partner institutions and academic program directors to ensure that students coming to study at Fontys have a sufficient level of English to cope in an academic environment. If any students level of English is considered (by their host tutors) to be inadequate, they may be asked to return home. We would like to be sure that students spending time at Fontys will derive genuine academic benefits from their study abroad period, so a reasonable competency in English is imperative for this very reason. Students from non-EER countries need to supply us with an IELTS 6.0 or TOEFL 550 document.

**Study costs**

Erasmus Exchange students are exempted from paying tuition fees. For accommodation (approximately) 2.250 euro needs to be reserved. Students are expected to have a laptop running Windows 10. An extra amount of about 150 Euro needs to be reserved for books, readers and possibly supporting equipment.

**Erasmus**

For students from Europe Erasmus grants could be available. Students should apply for these grants at the university in their own country.

# Exchange Programs Engineering FALL SEMESTER August 2022 – February 2023

<b>Electrical and Electronic Engineering S7 – Embedded Systems</b>	<b>Code</b>	<b>EC</b>	3 years study Electrical & Electronic Engineering
<b>Mandatory part of the program<sup>1</sup></b>			
Advanced Embedded Systems	EBAES	4	
Sensor Technology	EBST	4	
Advanced Power Electronics	EAAPE (S7)	4	
Advanced Control Systems	EBACS (S7)	4	
Advanced Telecom / IoT	EBTEL/IoT (S7)	4	
Digital System Design	EASD (S7)	4	
Models Based System Engineering	EBMBSE	2	
Electromagnetic Compatibility 7	MAEMC7	2	
Project S7	Project S7	10	

<sup>1</sup> This program consists of 30 ECTS. As the project is integrated with the courses provided in this program, the student must follow all mandatory courses (EBATEL/IoT, EBAES, EBMBSE and MAEMC7) and choose two elective courses. Please note that for the elective courses, EBACS and EBST are given simultaneously and you can only choose one. Similarly, EADSD and EAAPE are given simultaneously and you can only choose one.

<b>Electrical and Electronic Engineering S7 – Electronic Systems</b>	<b>Code</b>	<b>EC</b>	3 years study Electrical & Electronic Engineering
<b>Mandatory part of the program<sup>2</sup></b>			
Advanced Embedded Systems	EBAES	4	
Sensor Technology	EBST (S7)	4	
Advanced Power Electronics	EAAPE (S7)	4	
Advanced Control Systems (1)	EBACS (S7)	4	
Advanced Telecom / IoT (2)	EBATEL/IoT	4	
Digital System Design	EADSD	4	
Models Based System Engineering	EBMBSE	2	
Electromagnetic Compatibility 7	MAEMC7	2	
Project S7	EAPRS7	4	

<sup>2</sup> This program consists of 30 ECTS. As the project is integrated with the courses provided in this program, the student must follow all mandatory courses (EBST, EAAPE, EBMBSE and MAEMC7) and choose two elective courses. Please note that for the elective courses, EBACS and EBAES are given simultaneously and you can only choose one. Similarly, EADSD and EBATEL/IoT are given simultaneously and you can only choose one.

<b>Mechatronics Engineering S7 – Advanced Motion Control</b>	<b>Code</b>	<b>EC</b>	<b>Required background</b> 3 years study Mechatronics Engineering
<b>Mandatory part of the program<sup>1</sup></b>			
Applied Control Engineering 7	MAACE7 (S7)	4	
Dynamic Modelling & Design 7	MADMD7 (S7)	4	
Observers 7	MAOBS7 (S7)	4	
Electromagnetic Compatibility 7	MAEMC7 (S7)	2	
Advanced Embedded Systems 7	MBAES7 (S7)	4	
System Engineering 7	MBSYE7 (S7)	2	
Project S7	MAPRS7	10	

<b>Mechatronics Engineering S7 – Adaptive Automation Systems</b>	<b>Code</b>	<b>EC</b>	3 years study Mechatronics Engineering
<b>Mandatory part of the program<sup>1</sup></b>			
Mechatronic Systems 7	MBMSY7 (S7)	4	
Design for Adaptive Manufacturing 7	MBDAM7 (S7)	4	
Autonomous and Intelligent Systems 7	MBAIS7 (S7)	4	
Electromagnetic Compatibility 7	MAEMC7 (S7)	2	
Advanced Embedded Systems 7	MBAES7 (S7)	4	
System Engineering 7	MBSYE7 (S7)	2	
Project S7	MAPRS7	10	

<b>Mechanical Engineering S7 – Precision Engineering</b>	<b>Code</b>	<b>EC</b>	3 years study Elec Engineering
<b>Mandatory part of the program</b>			
Design Principles for Precision	WACM5 (S7)	4	
Production and Materials for Precision	WAPM13 (S7)	4	
Dynamic Behaviour of High-Tech System	WADG2 (S7)	4	
Finite Element Methods (FEM)	WACM10 (S7)	4	
System Engineering	WASYE7 (S7)	2	
Design for Excellence	WADFX (S7)	2	
Project S7	WAPRS7	10	

<b>Minor Be Creative</b>	<b>EC</b>	2 years study bachelor level
<b>Mandatory part of the program</b>	<b>30</b>	
Project based, technology-oriented minor.		

<b>Minor EmbraceTEC</b>	<b>EC</b>	2 years study bachelor level
<b>Mandatory part of the program</b>		
Integrated programme of workshops, group work, coaching, and assessment	30	