

Exchange Programmes <u>Spring semester 2019/2020</u> in <u>Engineering</u> 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 programmes 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, Oce, 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-

<u>programmes/Exchange-</u> <u>programmes/Engineering.htm</u>

Accommodation

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

Admission requirements

We rely on our partner institutions and academic programme 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 7 or 10. An extra amount of about 150 Euro needs to be reserved for books, readers.

Erasmus

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

Exchange Programmes Engineering SPRING SEMESTER January/February 2020 – July 2020

Required background

Electrical and Electronic Engineering S4	Code S4	EC	2 years study Elec Engineering	
Mandatory part of the program ¹				
Telecommunications 1	TEL1	3		
Digital Design 3	DD2	5		
Embedded Connectivity	EMBC	5		
Analog Electronics 4	AEN4	3		
Signal Processing	SP1	4		
EXPO: industrial projects (2)	PROJ6 & PROJ7	6		
Optional subject to complete the program (select one of the following three courses):				
Electromagnetic Compatibility	EMC	4		
Business Economics	HE4	4		
Customer Oriented Innovation	HE20	4		

Mechanical Engineering General	Code S4	EC	2 years study Mechanical Engineering
Mandatory part of the program			
Customer Oriented Innovation (S6)	EXHE20	5	
Machine Elements (S4)	EXMEACM4	5	
Applied Thermodynamics (S4)	EXMEAEP3	5	
Forming, DoE and AM (S4)	EXMEAPM3	5	
Project Integrated Product Development (S6)	EXMEAHE6P (IPD)	10	

Mechatronics Engineering S4	Code S4	EC	2 years study Elec Engineering
Deformations 4	DEF4	2	
Design Principles 4 Control Engineering 4A Control Engineering 4B	DPR4 CEN4 CEN4B	3 2 3	
Advanced Electronic Circuits 2 Sensors	AEC2 SNS4	3 3	
Sequential Digital Design Objected Oriented Programming 4	SDD4 OOP4	3	
Mathematics 4	MAT4	2	
Mandatory part of the program			
EXPO: industrial projects	PROJ6 & PROJ7	6	

¹ The (mandatory part of the) program consists of 30 ECTS. It is allowed to compose an individual program with less courses (and hence less ECTS) if your home university allows you to have less credits. The only exception holds for EXPO: Industrial Projects in the Electrical and Electronic Engineering S4 program and Project Integrated Product Development in the Mechanical Engineering General program and Engineering Minor as it is mandatory for all exchange students to participate in this project. It is not possible to combine courses of different programs.

Engineering minor	Code S6	EC	3 years study Elec Engineering
Mandatory part of the program			
Project Integrated Product Development	IPD	10	
Optional subjects:			
System Identification	SI	4	
Small Signal Audio Design	SSD	4	
Electromagnetic Compatibility	EMC	4	
Vision	VSN6	4	
Customer Oriented Innovation	HE20	4	
Business Economics	HE4	4	
Lean	PM10	4	

EmbraceTEC Minor	Code S6	EC	2 years study bachelor level
Mandatory part of the program Integrated programme of workshops (on 3D Printing and related topics), group work, coaching, and assessment		30	

Be Creative Minor	Code S6	EC	3 years study bachelor level
Mandatory part of the program			
Integrated programme of workshops (on request based on topic or skill), group work, coaching, and assessment		30	

Adaptive Robotics Minor	Code S6	EC	3 years study bachelor level
Mandatory part of the program			
Integrated programme of workshops (on request		30	
based on topic or skill), group work, coaching, and			
assessment			