

#### **COURSE SELECTION**

# APPLICATION FORM Year 2017/2018

# For Exchange Students only

Send this form to: Marisol VERSTRAETE - marisol.verstraete@centralesupelec.fr

# Semester 8: January 22 to June 8, 2018

Family Name	
Given Name	
Home Institution	
Country	

Normal course load at CentraleSupelec (Centrale Paris Engineering Program) is 30 ECTS per semester. Depending on the requirements of your home institution, you may either take the full 30 ECTS load, or choose A minimum of 24 ECTS.

To complete the normal S8 course load, select courses for elective series (8-13). You can take at most one course in each elective series because all courses within a given series are taught simultaneously. In order to help you sign up for the most appropriate courses for your requirements, you are asked to choose two elective courses by block, a choice A and a choice B.

We will inform you if any of the courses you select are not available.

#### **Language of Instruction**

The courses at CentraleSupélec are taught in one of four language options, specified as below:

- English (E), course entirely taught in English
- English or French (EF), there are two classes in parallel, one taught in French, one in English
- English on demand (E\*), the course is taught entirely in English, unless all students registered for the course have a sufficient command of French, in which case, the professor may choose to teach in French.
- French (F), course entirely taught in French

All courses available in English (E, EF or E\*) are highlighted in green in the rest of this form.

## **SEMESTER 8 (Spring 2017-2018)**

Course code and title		Hours	ECTS
<b>☞</b> Humanities and S	ocial Sciences.	32 hrs	2.0
Chassa one module	among the following period		
O SH3200 O SH3400 O SH3300 O SH3500 O SH3600	s among the following series Seminar Series: individuals, labor, organizations (EF) Seminar Series: International and Intercultural (EF) Science, Technology, Society Seminar series: Perspective on Key Social Issues Innovation, Arts and Creativity Into take an HSS module		
<ul><li>Project:</li><li>O WP 5200 Innovation Project</li><li>O I do not wish to do a project</li></ul>		150 hrs	9.0
oose at least one forei	gn language:		
<ul> <li>Language course 1</li> <li>O LC 1000 English as a Foreign Language</li> <li>O I do not wish to take English as a Foreign Language course 1</li> </ul>		24 hrs	2.0
<ul> <li>Language course 2</li> <li>O LC 2000 French as a Foreign Language</li> <li>O I do not wish to take French as a Foreign Language course 2</li> </ul>		24 hrs	2.0

# If you are fluent in both English and French, you may choose one of the following languages.

This option is available to you only if you have already had at least two semesters of study of the chosen language shortly prior to your arrival at CentraleSupélec.

Upon your arrival, you will have to take the French and English tests, and your level in the chosen language will be evaluated by the Language Department. If your results are satisfactory, your choices will be taken in account.

O LC 3000 German

O LC 4000 Spanish

O LC 5000 Italian

O LC 6000 Portuguese

O LC 7000 Chinese

O LC 8000 Japanese

O LC 9000 Russian

O I do not wish to take Foreign Language course 3

# **SEMESTER 8 (Spring 2017-2018)**

Please choose one course (choice A and B) per elective series. All courses within a given series are taught simultaneously.

Elective course 8 (0)	Choose A + B)	36 hrs	3.0
O O EN1201			
O O IS1220	Software engineering (E)		
O O SE2500	Modeling and analysis of Supply Chains (E)		
O O PH2813	Advanced Materials and Novel Devices for Information	n Technologies	(E*)
O O PR1100	Introduction aux Matériaux		
O O MA2822	Advanced Statistics		
O O MG1200	Civil Engineering		
O O IS1310	Problem solving by graphs: from theory to implementa	tion	
O O PR3100 O O SE2750	Chemical Engineering & Sustainable Development	\nnlications	
O O SE2750 O O WP2100	Stochastic Modeling and Theory of Queues and their A Sustainable Development and Technologies	Applications	
	sh to take a course in this elective series		
O O I do not wis	sit to take a course in this elective series		
	Choose A + B) or Lab courses (Choose A + B)	36 hrs	3.0
O O EN1500	Nuclear Engineering (E*)	( <b>-</b> +)	
O O IS1240	High Performance Computing for Engineering and Fin	ance (E^)	
O O SE3301	Introduction to Company Creation (E)		
O O MG1500 O O SE2700	Bio Mécanique Modeling for Decision Making		
O O SE2700 O O IS1330	Informatique théorique:calculabilité et langages formel	e	
O O MA2824	Differential Geometry	3	
	Economy and Design of Dams		
	sh to take a course in this elective series		
OR Lab. Courses which are n	ormally offered in S6, but also open to S8 students		
O O PH1910	Physics Lab (EF)	30hrs	2.0.
O O PR2940	Chemical & Environmental Engineering Lab. (EF)		
O O EN1920	Aerodynamics & Energy Science Lab. (EF)		
O O SE1950	Reverse Engineering & Rapid Prototyping Lab. (EF)		
O O IS2950	Electronics Lab. (EF)		
O O MG1960	Civil Engineering Lab.		
O O MG1970	Design of Mechanical Structures Lab		
O O PR1930	Materials & Corrosion Lab		
O O I do not wi	sh to take a course in this elective series		
Elective course 10		36 hrs	3.0
	Introduction to Atomic and Molecular Physics (E)		
O O MA2814	Introduction to Random Modeling (E)		
O O PR4300	Cogeneration and Energy Production (E*)		
O O SE2550	Introduction to Purchasing (E*)		
O O MA2620	Ordinary Differential Equations and Dynamic Systems		
O O MG2816	Micro-Electro-Mechanical Systems (MEMS)		
O O SE3200	Law 2 sh to take a course in this elective series		
O O I do Hot wi	on to take a course in this elective selles		

## **SEMESTER 8 (Spring 2017-2018)**

O O PH2500 O O SE2650 O O IS1250 O O MA2827 O O EN1600 O O MG2812 O O I do not wi	(Choose A + B)  Numerical Methods in Engineering applications (E*) A Crash Course in Modern Mathematical Physics (E) Risk Assessment and Management (E) Programing for mobile devices (E) Foundations of discrete optimization (E) Renewable Energy Introduction to Acoustics: Industrial and Musical Acousts to take a course in this elective series formally offered in S6, but also open to S8 students	ustics	3.0
O O PH1910 O O PR2940 O O EN1920 O O IS 2950 O O MG1960 O O MG1970 O O PR1930 O O I do not wi	Physics Lab (EF) Chemical & Environmental Engineering Lab. (EF) Aerodynamics & Energy Science Lab. (EF) Electronics Lab. (EF) Civil Engineering Lab. Design of Mechanical Structures Lab Materials & Corrosion Lab sh to take a course in this elective series	30hrs	2.0.
<b>☞</b> Elective course 12		36 hrs	3.0
O O EN1120 O O MG2817 O O PH2821 O O SE2800 O O MA2500 O O IS2210 O O MA2825 O O IS1350 O O PR2100 O O I do not wi	Heat Transfer (E) Applications of the Finite Element Method (E) Applications of statistical physics to socio-economica Production Planning and Scheduling (E*) Signal Processing and Sparse Coding (E) Opto-électronique Algebra and cryptology Mathematical Logic for computer sciences Traitement de l'eau sh to take a course in this elective series	I complex syst	ems (E)
Elective course 13	(Choose A + B) 36 hrs	3.0	
O O EN2910 O O MG2818 O O IS2960 O O WL2100 O O PH2814 O O EN2930 O O WL2200 O O MG2920 O O MG2819 O O PH2930 O O MA2828	Aircraft Design (E) Introduction to Petroleum Exploration and Production Electronics Laboratory (EF) Leadership in Project (E) Science-Fiction and Physics (E*) Powertrain Design (E) Ethics and Responsibility in Engineering Sustainable Buildings & Architecture Laboratory Siège Automobile du Future Nuclear Physics Laboratory (French Passport require Conception d'un mur antibruit ish to take a course in this elective series		

Total number of ECTS you intend to take in Semester 8:\_\_\_\_\_

Exchange students will be informed on the availability of their chosen course program once they are admitted. Send this form before November 15 to: <a href="mailto:marisol.verstraete@centralesupelec.fr">marisol.verstraete@centralesupelec.fr</a>

Important dates: Arrival on Campus: January 22, 2018

Compulsory Orientation Days: January 22 to 26, 2018 First day of Academic semester: January 29, 2018