INSA
INSTITUT NATIONAL
DES SCIENCES
APPLIQUÉES
TOULOUSE

COURSES TAUGHT IN ENGLISH AT INSA TOULOUSE

2022 2023
FOR EXCHANGE STUDENTS

INTRODUCTION

Founded in 1963, **INSA Toulouse is an international and multidisciplinary public engineering school** that offers a 5-year higher education degree programme leading to the "Engineering Degree", equivalent to a Master of Science or MEng.

The curriculum is divided into three phases tracks:

- **Year 1:** a common track for all engineering students to acquire fundamental knowledge
- **Year 2 and 3:** 4 pre-specializations
- **Year 4 and 5:** 8 specializations within 7 departments

The curriculum was designed to develop the autonomy of the students, letting them build their own professional projects step by step while acquiring robust scientific knowledge and develop both specific and transversal skills. INSA Toulouse students are given the opportunity to discover different activities and jobs by visiting companies, pursuing medium and large internships, and attending conferences and meetings.

Education at INSA Toulouse is closely linked to **top-level research,** seeking to enhance its students' ability to imagine and develop the technologies of the future. As part of its commitment to the research policy of the University of Toulouse, INSA Toulouse:

- has laboratories linked to each engineering department;
- has academics and researchers carrying out dynamic research in internationally recognized laboratories (CNRS, INRA, MESR);
- provides research training for all its engineering students throughout their curriculum (http://www.insa-toulouse.fr/en/recherche.html).

INSA Toulouse is a member of the **ECIU University,** the first European university where learners, teachers and researchers cooperate with cities and businesses to **solve real-life challenges** (https://www.eciu.org/).

INSA Toulouse has also been awarded the **"Welcome to France" label,** which rewards the quality of service for international students.

BECOMING AN EXCHANGE STUDENT AT INSA TOULOUSE:

All students may be exchange students at INSA Toulouse, provided that their home institution signed a Cooperation Agreement (Erasmus + or bilateral agreement) with INSA Toulouse. Exchange students are welcome to all INSA Toulouse departments **for up to 2 semesters.**

Students are advised to **choose the majority of their courses in one department** in order to prevent scheduling conflicts. On average, 1 ECTS credit equals 30 hours of in-class lectures and personal academic work. The learning agreement for one semester cannot exceed 30 ECTS credits and must be created in close collaboration with the international academic coordinator of the host department.

For further information regarding the application, preparation of the Learning Agreement and contacts, please consult: https://international.insa-toulouse.fr/en/international-students/exchange-semester

Contact: Ms Aymara CRUZ: a_cruz@insa-toulouse.fr

French as a Foreign Language, Foreign Languages and English-taught Humanities

INSA Toulouse offers 2 types of French language courses for its international students: in August as a **Summer School** and **throughout the year** via its Humanities Department (CSH). Students are advised to choose FLE courses even if they only follow courses taught in English.

INSA Toulouse also offers its international students foreign languages courses (Chinese, German, Italian, Portuguese, and Spanish) and other English-taught courses - listed at the end of this brochure.

For further information, please consult: https://csh.insa-toulouse.fr/fr/international.html

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TABLE OF CONTENTS

APPLIED MATHEMATICS

The rise of Machine Learning and Artificial Intelligence (AI) has reinforced the ever-growing need of Computer Science and Applied Mathematics skills to process, exploit and analyze this data, perform numerical simulations, gain a deeper understanding of complex systems and high-tech products, and predict their behavior. Data Science and AI are increasingly sought after by the transportation, environment, security, health, e-commerce, and insurance sectors, among others.

To this end, the training provides:

> A broad spectrum of methods and techniques in Applied Mathematics
> Long-lasting fundamentals and a solid culture of engineering sciences
> A deep mastery of IT tools
> Thorough knowledge of management techniques

KEY:

CC: Core Curriculum
Opt. 1/2 > Choose 1 course among 2
Opt. 2/4 > Choose 2 courses among 4
Opt. 3/8 > Choose 3 courses among 8

4TH YEAR | MASTER 1

	Organization	Course title	Course code	ECTS
SEMESTER 1 September - January	CC	> Optimisation	I4MATCOP11	4
	CC	> Signal 1	I4MATCTS11	4
	CC	> Elements of Statistical Modeling	I4MATCEMS11	4
	CC	> HPC, Matrix Caluclation and Large Space Systems	I4MATCHG11	4
	CC	> Quality, Security, Environment	I4MATCQSE11	2
	Opt. 1/2	> PDE II and MMC	I4MAOPEM11	4
	Opt. 1/2	> Advanced Probabilities	I4MAOPPA11	4
SEMESTER 2 January – June	CC	> Signal II and Optimisation	I4MATCTSO21	4
	CC	> Research Project-Innovation	I4MATCPT21	8
	CC	> Machine learning (ML)	I4MATCML21	4
	Opt. 2/4	> Finite Element Methods & Model Reductions	I4MAOPEF21	4
	Opt. 2/4	> Modeling and Scientific Computing for Solids and Fluids	I4MAOPMFS21	4
	Opt. 2/4	> Data Analysis	I4MAOPAD21	4
	Opt. 2/4	> Stochastic Processes: Time series and Gaussian Processes	I4MAOPPS21	4

5TH YEAR | MASTER 2

SEMESTER 1 September – January	CC	> High Dimensional and Deep Learning (HDDL)	I5MATCHDDL11	3
	CC	> Research Project-Innovation-Engeneering English	I5MATCPJ11	9
	Opt. 1/2	> Computer Experiments and Stochatic calculus	I5MAOPCECS11	3
	Opt. 1/2	> Computer Experiments and Experimental Design	I5MAOPCEED11	3
	Opt. 3/8	> Optimal Control, Data Assimilation & Model Learning	I5MAOPAD11	3
	Opt. 3/8	> Image	I5MAOPIM11	3
	Opt. 3/8	> Advanced models and numerical methods for fluid mechanics	I5MAOPMDF11	3
	Opt. 3/8	> Advanced modeling in computational structural mechanics	I5MAOPMDS11	3
	Opt. 3/8	> Reliability and Lifetime data analysis	I5MAOPFDV12	3
	Opt. 3/8	> AI Frameworks	I5MAOPIAF11	3
	Opt. 3/8	> Poisson processes and application to reliability theory and actuarial sciences	I5MAOPPDP11	3
	Opt. 3/8	> Mathematics and ML for Actuarial Sciences	I5MAMAA11	3

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WEBSITE : https://lien.insa-toulouse.fr/applied_mathematics

APPLIED PHYSICS: MICRO & NANO TECHNOLOGIES

The Applied Physics specialization program trains engineers with a broad scientific spectrum to prepare them to cope with the technical and scientific challenges of tomorrow, including:

> Energy transition (energy efficiency, energy storage and conversion, renewable energy production, etc.)
> Digital society (quantum materials, technologies and devices)
> Global health (micro- and nano-systems for biology, health and environmental analysis, etc.)
> Mobility and infrastructure (materials, transportation structures and components, aeronautics and space, etc.)

The Applied Physics specialization provides students with the technical and creative knowledge to be in a position to:

> Bring innovation to the field of cutting-edge technology
> Be part of a team and contribute to responsible development
> Easily adapt to an ever-changing industrial world

The main areas of training are the physics of materials and components, nanotechnology, sensors, instrumentation, testing and measurement.

3RD YEAR | BACHELOR 3

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Electromagnetic waves in matter	3MAPH31	2.5

4TH YEAR | MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Solid State physics I	I4GPPM11-1	2.5
	> Quantum Physics II	I4GPPM11-2	2.5
	> Instrumentation	I4GPII11	5
	> Laboratory Works 1	I4GPLP11	5
	> Multidisciplinary project 1	I4GPPJ11-1	5
	> New development in Physics report	I4GPPR	4
	> Nano Physics	I5GPNN11-1	2.5
	> Nano Chemistry	I5GPNN11-2	2.5

5TH YEAR | MASTER 2

SEMESTER 1 September - January	> Physics Engineering: Nanofabrication, Hyper-frequencies	I5GPPV11	5
	> Laser Technics and scientific communication	I5GPAP11	5
	> Micro-nano-electro-mechanical systems-nanotechnology Engineering -Workshop	I5GPNM11 *	5
	> Nanobioengineering Workshop	I5GPNB11 *	5
	> Graphene Workshop	I5GPGR11 *	5
	> Instrumentation project	I5GPIA11 *	5
	> FPGA and real time instrumentation	I5IPGA12 *	5
	> Innovative technologies, devices and materials	I5GPTI11	5
	> NanoPhysics and Nanochemistry	I5GPNN11	5
	> New development in Physics report	I5GPPR	4

* Students can choose one only workshop as they are run in parallel.

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WEBSITE : https://lien.insa-toulouse.fr/applied_physics

ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT

The Electrical and Computer Engineering department offers two distinct programs within the following fields: Automatic Control and Electronics, and Computer Science and Networks.

The Electrical and Computer Engineering department is equipped with a platform dedicated to connected objects, including several USRPs (Universal Software Radio Peripherals - fully reconfigurable equipment for the implementation of wireless communications), IoT cards (ST Microelectronics, Intel, NXP, etc.), antennas, oscilloscopes, spectrum analyzers and laptop PCs. This platform is used to study, design and implement communication protocols dedicated to communicating objects, as well as the security of these protocols.

The Electrical and Computer Engineering department is equipped with a hardware platform dedicated to characterizing the electromagnetic compatibility of electronic equipment. It comprises an anechoic chamber, antennas, spectrum analyzers, RF power amplifiers and TEM cells, enabling the measurement of electromagnetic emissions and immunity to electromagnetic interference between 150 kHz and 6 GHz.

The objective of the Automatic Control & Electronics specialization is to train engineers who can apply their skills to automatic control, signal processing, electronics and computer science, the design process of complex systems and the development of the automatic control subsystem or the electronic and microelectronic subsystems, while implementing the associated IT tools.

AUTOMATIC CONTROL AND ELECTRONICS

4TH YEAR | MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Analysis of Complex Systems	(Extension of I4AESY11)	10
	> Device Modelling and Advance Digital Design (Reconfigurable Computing)	(Extension of I4AESE41)	10
	> Research Project	(Extension of I4AEPJ11)	10
	> Computer engineering	(Extension of I4AEIM11)	6
SEMESTER 2 January - June	> Security for IoT	(Extension of MSIO-TSEC11)	10
	> Object oriented design and programming	(Extension of I4AEIL11)	10
	> Research Project	(Extension of I4AEPJ11)	10
	> Petri Networks	(See Petri Networks part in I4AESY21)	6

WEBSITE : http://www.insa-toulouse.fr/en/formation/ingenieur/nouvelle-page/sciences-technologies-health-STS/engineer-background-FI/automatic-control-and-electronics-program-program1-frsiretnullpri5ae000-en.html

THEME : INNOVATIVE SMART SYSTEMS | 5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Smart Devices	I5SSEN11	5
	> Communication protocols for IoT	I5SSCM11	5
	> Middleware and Services	I5SSIL11	5
	> Data analysis and processing / Big Data	I5SSIF11	4
	> Innovative Project – Challenge Based Education	I5SSRS11	5
	> Innovation and Humanity	I5SSGE11	6
SEMESTER 2 January - June	> Master Thesis (in industry or academia)		30

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WEBSITE : http://gei.insa-toulouse.fr/en/academics/master-programs.html

COMPUTER SCIENCE AND NETWORKS

The objective of the Computer Science & Networks specialization is to train engineers who master the software development process and the design of complex, communicating and networked-distributed computer systems, while complying with safety standards and/or real-time constraints. Engineers graduating from this program are outward-looking, able to communicate and innovate while being aware of the socio-economic complexity of the business. The Internet of Things and Artificial intelligence are considered major industrial evolutions and strategic key points for companies. It pushes the boundaries when it comes to gathering, analyzing and sharing massive digital data.

4TH YEAR | MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September –January	> Object oriented design and programming	Extension of I4IRIL11	10
	> Security for IT	Extension of I4IRRS11	10
	> Research project	Extension of I4IRPJ11	10
	> Fundamentals in Computer Science	Extension of I4IR-IF11	10
	> Wireless and Mobile Networks	Extension of I4IRRS21	10
	> Computer engineering	Extension of I4IR-IF31	6
SEMESTER 2 January – June	> Security for IoT	Extension of MSIO-TSEC11	10
	> Object oriented design and programming	Extension of I4AEIL11	10
	> Research Project	Extension of I4IRPJ11	10
	> Software and Hardware Architecture for Computer Systems / Compilers Development and Reconfigurable Computing	Extension of I4IRIM11	10
	> Petri Networks	See Petri Networks part in I4AESY21	6

THEME: INNOVATIVE SMART SYSTEMS | 5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September –January	> Smart Devices	I5SSEN11	5
	> Communication protocols for IoT	I5SSCM11	5
	> Middleware and Services	I5SSIL11	5
	> Data analysis and processing / Big Data	I5SSIF11	4
	> Innovative Project – Challenge Based Education	I5SSRS11	5
	> Innovation and Humanity	I5SSGE11	6
SEMESTER 2 January – June	> Master Thesis (in industry or lab)		30

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WEBSITE : http://gei.insa-toulouse.fr/en/academics/master-programs.html

BIOLOGICAL ENGINEERING

The objective of the Biological Engineering specialization is to train engineers who master the whole set of methodologies dealing with the biological conversion of biotic and non-biotic materials, from the laboratory to the industrial scale.

Biological engineers design and develop new biocatalysts (enzymes and microorganisms) that meet industrial constraints, and calculate and optimize the performance of biological reactors and extraction-purification processes.

THEME 1: BIOTECHNOLOGY | 4TH YEAR | MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Cellular metabolism & regulation	I4GBBC11	4
SEMESTER 2 January – June	> Microbial & Mammalian Cells Culture	I4GBBC31	7
	> Genetic & Enzyme Engineering: tools for synthetic biology	I4GBBM21	4

THEME 2: MICROBIOLOGY & INDUSTRIAL BIOCATALYSIS | 5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Microbiology & biocatalysis for industry	I5GBBC11	12
	> Microbiology & biocatalysis for industry: lab work	I5GBBC21	12

THEME 3: SYNTHETIC BIOLOGY | 5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Systems & Synthetic biology for biotechnologies	I5GBBM11	12
	> Systems & Synthetic Biology: lab work	I5GBBM21	12

WEBSITE : http://www.insa-toulouse.fr/en/formation/ingenieur/nouvelle-page/sciences-technologies-health-STS/engineer-background-FI/biochemical-engineering-program-program1-frsiretnullpri5bi000-en.html

THEME 4: BIOECONOMY | 4TH YEAR - MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Synthetic biology 1	M1BIBC11	2
	> System biology 1	M1BIBC21	2
	> Enzyme System 1	M1BIBC31	2
	> Biochemical engineering 1	M1BIBC41	2,5
	> Upstream and Downstream Processing 1	M1BITF11	2,5
	> Ethical Issues 1	M1BIET11	2
	> Bioeconomy 1	M1BIEC11	2
	> Practical training in research laboratory	M1BIPJ11	15

5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Life Cycle Assessment	M2BITF11	2,5
	> Ethical Issues 2	M2BIET11	2,5
	> Bioechemical engineering 2	M2BIBC11	2,5
	> Enzyme System 2	M2BIBC21	2,5
	> Entrepreneurial skills and leadership	M2BILE11	2
	> Bioprocess design / Project management	M2BITF21	8
	> Practical courses	M2BIPJ11	10

WEBSITE : https://www.insa-toulouse.fr/fr/formation/master2r/biotecheco.html

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CHEMICAL ENGINEERING: WATER, ENERGY, ENVIRONMENT

The aim of the GP3E training is to train engineers able to deal with the major societal challenges of water, energy and the environment, so that they can become proactive players in today's socio-economic world and the leaders of energy transition, circular economy and adaptation to climate change.
In order to address the Water, Energy and Environment challenges, its engineers must be proficient in basic sciences and have an in-depth understanding of the basic concepts of chemical engineering, in addition to social and communication skills, and the ability to manage and lead professional teams at both the national and international stages.
The department trains its students into becoming expert engineers in: Drinking water production and water treatment; Processes & energy; Eco-design; Environment; Methanization; Carbon accounting; Renewable energies and energy efficiency; Waste treatment and valorization; and Sustainable chemical engineering.

4TH YEAR | MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Unit operations for industrial processes	M4FELF16	8
	> Transport and transfer Phenomenon	M4FELF 17	5
	> Research Project	M4FELF15	5
SEMESTER 2 January – June	> Ecoconception ans life cycle analysis	M4WAT21	4
	> Biological processes for water treatment	M4WAT22	6
	> B-Membrane Processes	M4WAT24	3

5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Drinking water and circular water economy	M5WAT01	8
	> Reactor design and flow assurance	I5PETF11_01	5
	> Process Dynamic, optimization and control	I5PECS11_01	5
SEMESTER 2 January - June	> Introduction to Research (Project)	I4PEPJ11_01	5

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CIVIL ENGINEERING

The teaching and research missions of the Civil Engineering department are geared towards the construction sciences. It trains managers who can operate at all stages of a construction project.

INSA Toulouse civil engineers intervene in the following areas:

- Building: structural systems, technical and comfort equipment, etc.
- Public works: infrastructures, bridges, roads, earthworks, etc.
- Urban planning: spaces, public roads, clean-up campaigns, networks, etc.

In 4th year (MSc1), students must choose one major:

- Structural Engineering: structural design for buildings, infrastructure, design and production of civil engineering structures, geotechnical design
- HVAC and Building physics: understanding and design of technical and comfort elements: heating, acoustics, energy, electricity and smart homes.

In 5th year (MSc2), four professional orientations are available:

- Civil Engineering
- Structural Engineering
- HVAC and Building physics
- Durability of Construction

As well as three interdisciplinary programs: Urban Engineering, Energy and Risk engineering.

The Civil Engineering department also prepares researchers and teacher-researchers to join public or private research laboratories of major companies.

4TH YEAR | MASTER 1

	Course title	Course code	ECTS
SEMESTER 1 September –January	> Reinforced Concrete	I4GCBA12	3
SEMESTER 2 January – June	> Reinforced and prestressed concrete – Module on prestressed concrete undergraduate level	I3ICBA11	2
	> Sustainable materials	A4GCEC21 (submodule)	2
	> International Civil engineering	A4GCEC21 (submodule)	2
	> Multidisciplinary project Concrete Shear wall and Steel structure design		10

5TH YEAR | MASTER 2

SEMESTER 1 September –January	> Buildings of the future - part "Renewable energy in buildings"	I5GCNR12	2
	> Buildings of the future - part "Dynamic Thermal Simulation using TRNSYS"	I5GCNR12	2
	> Urban Engineering workshop*	I5PTGU35	8
	> ID-RIMS Physical Chemistry of Durability of cement based materials	MSIRPC11	2
	> ID-RIMS Physical Chemistry of Durability - Module on Early-age behavior of concrete	MSIRPC11-03	1.5
	> ID-RIMS Mechanics of materials and structures - Module on Finite Elements	MSIRMM11	1.5
	> ID-RIMS Mix design and Microstructure	MSIRFM11	1.5
	> Multidisciplinary project Concrete and Timber		10

*limited number of students

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WEBSITE : https://lien.insa-toulouse.fr/civil_engineering

MECHANICAL ENGINEERING

The objective of the Mechanical Engineering specialization is to train general engineers with a proper balance of scientific, technological and systems knowledge.

The training offered by this program takes into account all the data related to the life of a product or system, from its preliminary design to its production and potential recycling, all within a concurrent engineering approach.

The 4th year of Mechanical Engineering is devoted to furthering knowledge of mechanical engineering (systems architecture, automatic control, thermodynamics, fluid mechanics, computational mechanics, design, industrialization, etc.). The 5th year provides all the extra tools to ensure a perfect transition towards the job market.

Students will choose a major:

> Mechanical Engineering: to become a general engineer who can carry out the comprehensive design of mechanical components and systems. The course enables students to develop skills in structural design, fluid mechanics, energy production and industrialization.

> Systems Engineering: to become an engineer who can specify, design and manage the integration and validation of complex technological systems. These systems, historically coming from the mechanical field (aircraft, car, etc.) have evolved by integrating other technologies using signals (sensors, computers, etc.) or energy (electrical, thermal, hydraulic, etc.).

THEME: MECHANICAL ENGINEERING | 4TH YEAR | MASTER 1

SEMESTER 1 September –January	> Finite Elements (FEM)	I4GMEF71_E1	2
	> Vibrations	I4GMEF71_E4	2
SEMESTER 2 January – June	> Heat transfer	I4GMMF81_E1	2,5
	> Fluid mechanics	I4GMMF81_E2	2,5
	> Modelling mechanical systems I	I4GMMA81_E2	3
	> Vibrations in industrial systems	I4GMMA81_E3	2
	> Multidisciplinary industrial project	I4GMPJ81	6
	> Research Project (Individual Project in the lab)	I4GMPR81_Ind	max 10

THEME: MECHANICAL ENGINEERING | 5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September –January	> System Modelling and simulation	I5GMSY91	3
	> Composite structures (Text and exams in English)	I5GMMX91	3
	> Engineering thermodynamics	I5GMTH91	3
	> Non destructive testing with technical English	I5GMCA91	4
	> Optional Module 1 (chosen from a list)	I5GMOP92_E1	3
	> Optional Module 2 (chosen from a list)	I5GMOP92_E2	3
	> Optional Module 3 (chosen from a list)	I5GMOP92_E3	3
	> Research Project (Individual Project in the lab)	I5GMPR91_Ind	max 10

MECHANICAL ENGINEERING

THEME: SYSTEMS ENGINEERING | 4TH YEAR | MASTER

SEMESTER 2 January – June	> Mechatronics Project (Individual) with QSE environmental	I4ISPM11_Ind	10
	> Research Project (Individual Project in the lab) *	I4GMPR81_Ind	max 10

THEME: SYSTEMS ENGINEERING | 5TH YEAR | MASTER 2

	Course title	Course code	ECTS
SEMESTER 1 September –January	> Reliability	I5ISGR22_E1	2
	> Industrialization	I5ISPR22_E1	2
	> Systems on a Chip	I5ISEC11_E1	6
	> Numerical Simulation in Thermo Fluid Mechanics	I5ISTH12_E1	2
	> Introduction to Thermo machines	I5ISTH12_E2	2
	> Modelling Thermo systems	I5ISTH12_E3	2
	> Optional Module 1 (chosen from a list)	I5GMOP92_E1	3
	> Optional Module 2 (chosen from a list)	I5GMOP92_E2	3
	> Optional Module 3 (chosen from a list)	I5GMOP92_E3	3
	> Research Project (Individual Project in the lab) *	I4MPR81_Ind	max 10

* For information about our research lines, see the Institute Clement Ader website: www.ica.cnrs.fr

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WEBSITE : https://lien.insa-toulouse.fr/mechanical_engineering

HUMANITIES

The Humanities Department (CSH) courses aim to develop both specific knowledge and soft skills in French, English and another foreign language:

In years 1, 2 and 3, students develop general skills in professional communication: oral presentations, report writing, documentary research, document synthesis, etc.

In years 4 and 5, students acquire skills in group facilitation and scientific and technical communication: communication in the context of project management and conflict management, presentation and synthesis of technical or scientific data, etc.

Language teaching also includes interculturality.

The main goal of the teaching teams is to prepare students for the job market and to put their actions into perspective by taking into account social, economic, ethical and cultural contexts.

The courses in French as a Foreign Language (FLE) aim to support students in the acquisition of the French language.

BACHELOR LEVEL

	Course title	Course code	ECTS
SEMESTER 1 September - January	> Job Search	I3CCGE11	2
SEMESTER 2 January - June	> Company environments & means of communication - English language	I2CCGE31	2
	> Communicating in Foreign Languages - level 3 - English	I2CCLA31	2
	> Business Management & English- Business English	I3CCGE41	2

MASTER LEVEL

SEMESTER 1 September - January	> Developing Management Skills - Marketing	I4CCGE11	1
	> Professional Relations and Ethics - Team Management	I5CCGE21	1
	> Scientific project in English (with department)	I5PEPE21_01	2
SEMESTER 2 January - June	> Scientific English - Initiation to Research (with department)	I4CCLA11	2

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