






## EC – Expression and Communication


▶ LE03	Practical English and TOEIC
<p> C 14  TD 28  TP 21  THE 57 </p> <p> AUTUMN  SPRING </p> <p> 6 CREDITS </p> <p>  </p> <p> Prerequisites :  LE02 ou équivalent </p>	<p><b>OBJECTIVES:</b></p> <ul style="list-style-type: none"> <li>▶ Use of English for communicating in a working environment, intercultural awareness and preparation for TOEIC exam.</li> </ul> <p><b>SYLLABUS:</b></p> <ul style="list-style-type: none"> <li>▶ Written communication: tools for work (covering letters, CVs, reports)</li> <li>▶ Oral communication: work and leisure situations (participating and chairing meetings, individual and group presentations, job interviews)</li> <li>▶ Grammar: verb tenses and forms, articles, complex sentences</li> </ul>
▶ LE07	English for Technology and Industry
<p> TD 28  TP 14  THE 38 </p> <p> AUTUMN  SPRING </p> <p> 4 CREDITS </p> <p>  </p>	<p><b>OBJECTIVES:</b></p> <ul style="list-style-type: none"> <li>▶ Acquire keyword vocabulary for industry.</li> <li>▶ Introduction to technical descriptions: project, equipment, process.</li> <li>▶ Roleplay industrial activities.</li> </ul> <p><b>SYLLABUS:</b></p> <ul style="list-style-type: none"> <li>▶ Working in industry</li> <li>▶ Figures, measurements, graphs and diagrams</li> <li>▶ Describing a piece of equipment, a system, a process</li> </ul>

► LE09		English for oral communication
TD	28	<b>OBJECTIVES:</b> ► Give students the techniques and methods for preparing and giving an effective presentation.
TP	14	
THE	38	
AUTUMN SPRING		<b>SYLLABUS:</b> ► What makes a good speaker? ► The three parts: audience, presentation and speaker. ► The speaker's signals ► Preparation: generating ideas and identifying priorities ► Structure: 3 golden rules ► Key skills: the three Vs: Visual, Vocal, Verbal ► How to keep the audience's attention ► Reading a text ► Listening ► Dealing with questions
4 CREDITS		
		
Prerequisite : LE03		

▶ LS02		Spanish Level II
TD	28	<b>OBJECTIVES:</b> ▶ Consolidate students'knowledge from different sources by reviewing fundamental language skills. ▶ Learn to manage different situations.
TP	14	
THE	38	
AUTUMN SPRING		<b>SYLLABUS:</b> ▶ The world of work, clothes, business ▶ Work, employment ▶ The home, where we live ▶ Food, restaurants ▶ Travel, advice, accidents ▶ Shops ▶ Tourism, transport ▶ Working with colleagues ▶ The State ▶ Youth (past and present) ▶ Automobile industry ▶ Leisure ▶ Messages and letters ▶ Progressive verbs, revising the basics, frequently used nuances
4 CREDITS		
		
Prerequisites : LS01 ou équivalent		

▶ LS03		Practical Spanish and International Exam
TD	42	<b>OBJECTIVES:</b> ▶ Improve language skills acquired in previous course credits. ▶ Be more at ease while communicating. ▶ Preparation of international exam. ▶ Presentations.
TP	21	
THE	57	
AUTUMN SPRING		
6 CREDITS		<b>SYLLABUS:</b> ▶ Companies, the workplace ▶ Intercultural awareness in companies ▶ Women and managerial positions ▶ Emigration ▶ Tourism industry ▶ Education, culture and television ▶ Sport ▶ Cuba ▶ Sustainable development and the environment ▶ Learning to be an entrepreneur ▶ Technology in everyday life ▶ The Spanish-speaking world and the United States
		
Prerequisites : LS 02 ou équivalent		

- ▶ Written and oral communication (presentations)
- ▶ Grammar: consolidating and mastering more subtle ways of expression

▶ SL02	Independent Language Study in Spanish
<p>THE 80</p> <p>AUTUMN SPRING</p> <p>4 CREDITS</p> 	<p><b>OBJECTIVES:</b></p> <ul style="list-style-type: none"> <li>▶ Allow students to consolidate skills by carrying out individual work with the help of a tutor.</li> <li>▶ Develop and produce a project.</li> </ul> <p><b>SYLLABUS:</b></p> <ul style="list-style-type: none"> <li>▶ Joint definition of a subject by student and teacher.</li> </ul>

## Glossary of Online UV consultation

**Prerequisite** : Some UVs require that previous UVs must have been successfully completed. Some UVs have several prerequisites.

**ACM** : Actuators and Mechatronic Control Systems Specialisation.

**C** : Lecture

**Category** : Each UV is classed in one of the following categories:

- CS Scientific Knowledge;
- TM Techniques and Methods;
- EC Expression and Communication;
- CG General Education;
- RN Revision;
- EX Exterior.

**CDP** : Product Design and Development Specialisation

**CIM** : Design and Material Innovation Specialisation

**UV Code** : Code designating a UV

**ECTS Credit** : The value of a UV in the ECTS system (European Credit Transfer System)

**CSM** : Mechatronic System Design Specialisation

**CSP** : Production Systems Design Specialisation

**Department** : Teaching Department

**Dept.** Teaching Department

**DIC** : Industrial Design Specialisation

**EDD** : Energy and Sustainable Development Specialisation.

**EDIM** : Ergonomics, Design and Mechanical Engineering Department

**EIC** : Ergonomics, Design and Innovation Specialisation

**EnE** : Energy and Environment Specialisation.

**ESE** : Electronics and On-Board Systems Specialisation

**Specialisation** : Specialisation within a department

**GESC** : Electrical Engineering and Control Systems Department

**UV Guide** : The UV Guide catalogues all UVs taught at UTBM during an academic year.

**HUMA** : Humanities Department

**IIRV** : Image, Interaction and Virtual Reality Specialisation

**ILC** : Software and Knowledge Engineering Specialisation

**IMAP** : Manufacturing Management and Engineering Department

**INFO** : Computer Science Department

**IP** : Product Industrialisation Specialisation

**Language (teaching)** : Language in which a UV is taught in.

**LEIM** : On-Board Software and Mobile Computing Specialisation

**MC** : Mechanical Engineering and Design Department

**MOM** : Numerical Modelling in Mechanics.

**MPL** : Management of Production and Logistics Specialisation

**Level** : Level of UV within degree courses. From 01 to 06

**Basket** : Contains the UVs chosen by a user to create a personalised catalogue

**PISP** : Managing and Computerising Production Systems Specialisation

**Recognition** : Level of recognition within a specialisation or department (0, 1 or 2) for a UV :

- 0: the UV has no link with the specialisation. It does not count as part of the department's degree course, but rather as an additional UV.
- 1 or \*: the UV is related to the department's degree course but is not part of the group of key skills to be acquired for the specialisation.
- 2 or \*\*: the UV is part of the group of key skills to be acquired for the specialisation.

**R&T** : Networks and Telecoms Specialisation

**Semester** : Indicates during which semester a UV is taught

**Timetable Organisation** : The way in which a UV is divided up into its constituent parts (TD, TP, Lecture, THE)

**TC** : Common core. Equivalent to first two years of an Engineering Degree

**TD** : Tutorials

**THE** : Unsupervised work. The number of hours of personal work necessary to complete a UV


**TP** : Practicals

**TSE** : Transport and Drive Systems Specialisation.

**UV (Course Credit)** : Course taught at UTBM. A Course Credit is taught within a department or department specialisation

# Key

- 1 C : Lecture
- 2 TD : Tutorials
- 3 TP : Practicals
- 4 THE : Unsupervised work. The number of hours of personal work necessary to complete a UV.
- 5 Prerequisite : Some UVs require that previous UVs must have been successfully completed. Some UVs have several prerequisites.
- 6 EIC : Ergonomics, Design and Innovation Specialisation
- 7 DIC : Industrial Design Specialisation
- 8 ECTS Credit : The value of a UV in the ECTS system (European Credit Transfer System)
- 9 Language (teaching) : Language in which a UV is taught in.

CP92					Design and Dimensioning of Complex Shapes			
1 32	2 28	3 18	4 42	5 9		8 SPRING	6 CREDITS	7 *DIC *EIC 5 Prerequisite CP80
<b>OBJECTIVES:</b> <ul style="list-style-type: none"> <li>► Gain awareness in the modelling of complex shapes.</li> <li>► Students should be able to model objects and their associated interfaces using ergonomic and aesthetic criteria.</li> </ul>					<b>SYLLABUS:</b> <ul style="list-style-type: none"> <li>► Impact of aesthetic, ergonomic, material and manufacturing constraints on product shape</li> <li>► CAD surfaces in advanced software</li> <li>► Mathematics applied to geometry (splines, Bézier curves, Nurbs)</li> <li>► A-class complex surfaces</li> </ul>			