


## EX – Extra-Curricular Activities

| ▶ ST40  |    |    |     | Training Period  |                  |            |  |
|---|----|----|-----|--|------------------|------------|--|
| C   | TD | TP | THE |   | AUTUMN<br>SPRING | 30 CREDITS |  |
| 0   | 0  | 0  | 750 |  |                  |            |  |
| <b>OBJECTIVES:</b> <ul style="list-style-type: none"> <li>▶ Gain an understanding of the company environment during a training period.</li> <li>▶ Acquire and improve skills while applying theory to solve concrete problems.</li> </ul> |    |    |     | <b>SYLLABUS:</b> <ul style="list-style-type: none"> <li>▶ Training period in company at assistant engineer level</li> <li>▶ Report, presentation</li> <li>▶ All students wishing to carry out a training period must complete the health and safety course.</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<br>32   | 2<br>28 | 3<br>18                                   | 4<br>42   | 9<br> | 8<br>6 CREDITS | 7<br>*DIC *EIC<br>5<br>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> |  |                |  |