

## Block view of the study programme

Or Th Pr Au Cr

### Bloc 1 du programme de l'année

Informations complémentaires

#### Compulsory courses

##### Module 1 : Vehicle dynamics and safety

MECA0492-2	<i>Vehicle dynamics</i> (english language) - Pierre DUYSINX	Q1	25	15	-	<b>3</b>
MECA0493-2	<i>Vehicle aerodynamics</i> (english language) - - Suppl : Pierre DUYSINX, Vincent TERRAPON	Q1	15	10	-	<b>2</b>
MECA0494-3	<i>Driveline and braking systems</i> (english language) - Olivier BRULS, Pierre DUYSINX	Q1	25	15	-	<b>3</b>
MECA0495-1	<i>Introduction to vehicle safety and body structure design</i> (english language) - Pierre DUYSINX, Ludovic NOELS	Q1	15	10	-	<b>2</b>
MECA0496-2	<i>Materials for automotive applications</i> (english language) - Jacqueline LECOMTEBECKERS, Ahmed RASSILI	Q1	25	15	-	<b>3</b>

Total : 13 credits / 8 weeks / 240 hours of lectures and lab works

Exam : After 8 weeks (mid term of semester 1)

##### Module 2 : Engine and electric propulsion systems

MECA0497-2	<i>Vehicle performance</i> (english language) - Pierre DUYSINX	Q1	15	10	-	<b>2</b>
MECA0498-2	<i>Internal combustion engines</i> (english language) - Philippe NGENDAKUMANA	Q1	25	15	-	<b>3</b>
MECA0499-2	<i>Electric traction motors</i> (english language) - Johan GYSELINCK	Q1	15	10	-	<b>2</b>
MECA0500-2	<i>Hybrid electric and fuel cell vehicles</i> (english language) - Pierre DUYSINX, Nathalie JOB	Q1	25	15	-	<b>3</b>
MECA0501-1	<i>Thermal and Electrical Management of vehicles</i> (english language) - Vincent LEMORT	Q1	15	10	-	<b>2</b>

Total : 12 ECTS / 8 weeks / 240 hours of lectures and lab works

Exam : After 8 weeks (end of semester 1)

##### Module 3 : Project and Internship

MECA0509-1	<i>Sustainable engineering processes</i> (english language) - Georges PELSEMAEKER		15	30	-	<b>5</b>
ACER0068-1	<i>Introduction to numerical methods in automotive engineering</i> - Eric BÉCHET, Olivier BRULS, Pierre DUYSINX, Ludovic NOELS		30	30	-	<b>5</b>
ASTG0112-1	<i>Internship</i> (english language) - COLLÉGIALITÉ	TA	-	-	-	<b>10</b>
ATFE3045-1	<i>Automotive Project</i> (english language) - COLLÉGIALITÉ	TA	30	-	-	<b>15</b>

Total : 35 ECTS / 14 weeks

Exam : After 14 weeks (end of semester 2)