

## Course details - 1<sup>st</sup> and 2<sup>nd</sup> year of the master (E4-E5)

### > Master in Smart Electronic Systems - *International track*

| Course content - 4 <sup>th</sup> year                    |          |                                |
|--|----------|--------------------------------|
| Module   | Hours    | Period                         |
| <b>1<sup>st</sup> semester</b>                           |          |                                |
| Semiconductor devices 1/2                                | 30       | September - October            |
| Sensors and Conditioning Circuits                        | 30       |                                |
| Introduction to MEMS and Microelectronic Principles      | 30       |                                |
| Signal Analysis  | 30       |                                |
| Intercultural Management and Communication               | 30       |                                |
| Optoelectronics  | 30       |                                |
| French as a Foreign Language for non-French speakers     | 16       |                                |
| Semiconductor devices 2/2                                | 20       | November - January             |
| Project  | 30       |                                |
| Nanomaterials and Nanosensors                            | 30       |                                |
| Hands on electronic PCB                                  | 30       |                                |
| French Business Culture and Communication                | 30       |                                |
| General Introduction to IoT                              | 30       |                                |
| or Acquisition and signal processing in bio applications | 30       |                                |
| French as a Foreign Language for non-French speakers     | 20       | February - April               |
| Radio-Com  | 30       |                                |
| Project  | 30       |                                |
| RF Modules   | 30       |                                |
| International Management                                 | 30       |                                |
| Clean-Room   | 30       |                                |
| French as a Foreign Language for non-French speakers     | 20       | <b>2<sup>nd</sup> semester</b> |
| Full Time Project / Internship                           | 3 months |                                |

## Course details - 1<sup>st</sup> and 2<sup>nd</sup> year of the master (E4-E5)

### > Master in Smart Electronic Systems - *International track*

| Course content - 5th year                            |          |                     |
|--|----------|---------------------|
| Module   | Hours    | Period              |
| <b>1<sup>st</sup> semester</b>                       |          |                     |
| Nanoelectronics                                      | 30       | September - October |
| Project  | 30       |                     |
| Communication in Research                            | 30       |                     |
| Corporate Profiling                                  | 30       |                     |
| Lab on Chip  | 30       |                     |
| French as a Foreign Language for non-French speakers | 20       | November - January  |
| Energy Transfer & Harvesting                         | 30       |                     |
| Radio Wave Propagation in Urban Environment          | 30       |                     |
| Antennas for Embedded Systems                        | 30       |                     |
| Project  | 30       |                     |
| MEMS Sensors   | 30       |                     |
| French as a Foreign Language for non-French speakers | 20       |                     |
| <b>2<sup>nd</sup> semester</b>                       |          |                     |
| Internship / Master Thesis                           | 6 months | From February       |

Total credits: 120 ECTS