

## Master of Science (M.Sc.) BSE I Battery System Engineering



## X Compulsory Elective Courses (choose 5 modules from which 3 should correspond to the topics of the Research Labs and Research Internship)

| Physical and Chemical Methods for Post-Mortem<br>Investigations of Batteries | 5 CP | Economics of Battery Applications and Recycling     | 5 CP |
|--|------|---|------|
|  |      | Hardware of Battery Packs & Stationary Applications | 5 CP |
| Battery Modelling and Mobile Applications                                    | 5 CP | Understanding Battery Degradation                   | 5 CP |
| Advanced Battery Diagnostics and Machine Learning                            | 5 CP |   |      |
| Advanced Battery Production Technology                                       | 5 CP |   |      |

## Elective Modules for the Research Internship (choose 1 module) & Research Labs (choose 2 modules)

| Chemical and Physical Cell and Material Analysis | 10 CP | Battery Pack Design and Battery Management System (HW)     | 10 CP |
|--|-------|--|-------|
| Diagnostics                                      | 10 CP | Sensors, Measurement Devices and Electronics               | 10 CP |
| Modelling  | 10 CP | Laboratory of Field Installation or Operation of Mobile or | 10 CP |
| Production                                       | 10 CP | Stationary Battery Systems                                 |       |
| Recycling and Life Cycle Analysis                | 10 CP |  |       |