University of Pitesti **APPROVED**

Faculty of Electronics, Communications and Computers **In Senate session**

Master degree program: Electronics of autonomous hybrid power sources **Date ................................**

Fundamental domain: Engineering Sciences

Field of Master: Electronics and Telecommunications Engineering **PRESIDENT OF THE SENATE**

Duration: 2 years **Conf.univ.dr. Nicolae BRINZEA**

The form of education: **F**

|  |  |  |
| --- | --- | --- |
|  | **CURRICULUM** Available in academic year 2015/2016 |  |
|  | **Year:** | **I** | **Semester:** | **I (1)** | 14 Weeks |
| **No.** | **Discipline** | **Hours / Week** | **PC** | **Eval.** | **Study time total** | Type discipline |
| **Title** | **Code** | **C** | **S** | **L** | **P** |
| 1 | Electronic technologies for renewable energy | 36.04.S.1.O.4.01 | 3 |   | 2 |   | 8 | E | 42 | Advanced knowledge |
| 2 | Sensors and actuators for industrial processes | 36.04.S.1.O.4.02 | 2 |   | 1 |   | 8 | E | 70 | Thoroughgoing study |
| 3 | Processes modeling and distributed energy generation systems | 36.04.S.1.O.4.03 | 2 |   | 1 | 1 | 7 | E | 42 | Synthesis |
| 4 | Project management research and design | 36.04.S.1.O.4.04 | 1 |   |   | 1 | 7 | C | 70 | Synthesis |
| **TOTAL**  | **8** | **0** | **4** | **2** | **30** |  | **224** |   |
|  | **Total hours per week** | **14** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | **Year:** | **I** | **Semester:** | **II (2)** | 14 Weeks |
| **No.** | **Discipline** | **Hours / Week** | **PC** | **Eval.** | **Study time total** | Type discipline |
| **Title** | **Code** | **C** | **S** | **L** | **P** |
| 5 | Advanced systems for diagnosis of the hybrid power sources | 36.04.S.2.O.4.05 | 2 |   | 1 |   | 7 | E | 56 | Advanced knowledge |
| 6 | Electronic circuits for control and command of the power converters | 36.04.S.2.O.4.06 | 2 |   | 1 | 1 | 8 | E | 56 | Thoroughgoing study |
| 7 | Information technologies for the energy management in smart microgrid | 36.04.S.2.O.4.07 | 2 |   | 1 | 1 | 8 | E | 56 | Thoroughgoing study |
| 8 | DSP algorithms in power management systems | 36.04.S.2.O.4.08 | 2 |   |   | 1 | 7 | E | 56 | Advanced knowledge |
| **TOTAL**  | **8** | **0** | **3** | **3** | **30** |  | **224** |   |
|  | **Total hours per week** | **14** |  |  |  |  |  |  |  |
|  | **CURRICULUM** Available in academic year 2016/2017 |  |
|  | **Year:** | **II** | **Semester:** | **I (3)** | 14 Weeks |
| **No.** | **Discipline** | **Hours / Week** | **PC** | **Eval.** | **Study time total** | Type discipline |
| **Title** | **Code** | **C** | **S** | **L** | **P** |
| 9 | Techniques for generating and energy storage in autonomous microgrids | 36.04.S.3.O.4.09 | 3 |   | 1 |   | 8 | E | 56 | Thoroughgoing study |
| 10 | Hybrid autonomous systems | 36.04.S.3.O.4.10 | 3 |   | 1 | 1 | 8 | E | 42 | Advanced knowledge |
| 11 | Systems with artificial intelligence for process management | 36.04.S.3.O.4.11 | 2 |   |   | 1 | 8 | E | 70 | Advanced knowledge |
| 12 | Research and design for master project preparation (I) | 36.04.S.3.O.4.12 |   |   |   | 2 | 6 | P | 56 | Synthesis |
| **TOTAL**  | **0** | **0** | **0** | **14** | **30** |  | **224** |   |
|  | **Total hours per week** | **14** |  |  |  |  |  |  |  |
|  | **Year:** | **II** | **Semester:** | **II (4)** | 14 Weeks |
| **No.** | **Discipline** | **Hours / Week** | **PC** | **Eval.** | **Study time total** | Type discipline |
| **Title** | **Code** | **C** | **S** | **L** | **P** |
| 13 | Research and design for master project preparation(II) | 36.04.S.3.O.4.13 |   |   |   | 14 | 30 | P | 224 | Synthesis |
| **TOTAL**  | **8** | **0** | **2** | **4** | **30** |  | **224** |   |
|  | **Total hours per week** | **14** |  |  |  |  |  |  |  |

RECTOR, DEAN, DIRECTOR OF DEPARTMENT

Prof. univ. dr. Sebastian PARLAC Prof. univ. dr. ing. Nicu BIZON Prof. univ. dr. ing. Ioan LIŢĂ