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**

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|  | **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** | |  | | |  |  | | | |  | |  | |  | | | |  | |
|  |  | |  |  | |  | | |  |  | | | |  | |  | |  | | | |  | |
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|  | **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