# Study and examination achievements required from students of foreign partner universities (incoming) in the Double Degree Program "Communication and Embedded Systems" (Master's program in Electrical and Information Technology) at Anhalt University of Applied Sciences

The study plan specifies the volume and allocation of modules to the individual academic semesters of the standard period of study, as well as their crediting. Components of the Master's examination include: compulsory and elective module examinations, the internship, the Master's thesis, and the Master's colloquium. Examination prerequisites are the preliminary services according to this document.

|   | Weekly semester hours 15 Weeks 15 Weeks |   | Examination Examination |   | Duration of the |              |      |             |         |
|---|---|---|-------------------------|---|-----------------|--------------|------|-------------|---------|
|   | ٧                                       | Ü | Р                       | Ü | Р               | prerequisite | type | examination | Credits |
| Module name german/english  1st and 2nd Academic Semesters                        |   |   |                         |   |                 |              |      |             |         |
| 1st and 2nd Academic Semesters  |   |   |                         |   |                 |              |      |             |         |
| This semesters are completed by the students at the respective partner university |   |   |                         |   |                 |              |      |             |         |
| Total 2nd Academic Semester   |   |   |                         |   |                 |              |      | 30          |         |

| 3rd Academic Semester  |   |   |  |       |   |         |   |
|--|---|---|--|-------|---|---------|---|
| Pflichtmodule/Compulsory modules   |   |   |  |       |   |         |   |
| Echtzeitsysteme/   | 3 | 1 |  | 1 PVL | К | 120 min | 5 |
| Real-Time Systems  |   |   |  |       |   |         |   |
| Hardware / Software Co-Design/<br>Hardware / Software Co-Design                        | 2 | 2 |  | 1 LNW | М | 20 min  | 5 |
| Kanalcodierung/<br>Channel Coding  | 2 | 2 |  | 1 LNW | М | 20 min  | 5 |
| Statistische Methoden der Nachrichtentechnik/<br>Statistical Methods in Communications | 2 | 2 |  | 1 LNW | М | 20 min  | 5 |
| Mobile Kommunikation/<br>Mobile Communications   | 3 | 1 |  | 1 LNW | К | 120 min | 5 |

| Wahlpflichtmodule/Compulsory elective module   | s (1 m | ust be | choser | 1) |  |       |   |         |   |
|--|--------|--------|--------|----|--|-------|---|---------|---|
| Systemprogrammierung/  |        | 3      | 1      |    |  | 1 PVL | К | 120 min | 5 |
| System Programming   |        |        |        |    |  |       |   |         |   |
| Mikrosystemtechnik/<br>Microsystems Technology   | 2      |        | 1      |    |  | 1LNW  | K | 120 min | 5 |
| Projektarbeit "Advanced Networking Administration"/ Individual Project Work "Advanced Networking Administration" |        |        | 4      |    |  | -     | В | -       | 5 |
|  |        |        |        |    |  |       |   |         |   |
| Total 3rd Academic Semester  |        |        |        |    |  |       |   | 30      |   |

|   |  |  |  |  |  | Н   |   | 25  |
|---|--|--|--|--|--|-----|---|---|
|   |  |  |  |  |  | P/C | 20 min                                  | 5   |
| The Master's thesis and the colloquium are generally completed under the joint supervision of a lecturer from Anhalt University |  |  |  |  |  |     |   | ersity  |
| of Applied Sciences and the respective partner university.  |  |  |  |  |  |     |   |   |
|   |  |  |  |  |  |     |   | 30  |
|   |  |  |  |  |  |     | 1 | ally completed under the joint supervision of a lecturer from Anhalt Univ |

|                        |   | <br> |  |    |
|------------------------|---|------|--|----|
| Total degree programme | ) |      |  | 90 |

Module completion: K Written Exam

M Oral Examination

PRO Project

H Homework Assignment

E/B Documentation
R Presentation
Ex Experimental Work
P Presentation
C Colloquium

oP Completion of the module without

examination/grade

Examination prerequisite: LNW Proof of Perfomance

TN 80 Proof of Participation 80 %

## Acceptation of examination and study achievements of students of the OPNU enrolled in the program:

### Automation and Computer-Integrated Technologies

| Compulsory modules  | Credits |
|---|---------|
| Modern control systems  | 6       |
| Robotic systems and complexes                                   | 6       |
| Administration of operating systems                             | 4,5     |
| Total   | 16,5    |
|   |         |
| Compulsory elective modules, of which 13,5 CP must be completed |         |
| Mobile communication protocols                                  | 4,5     |
| Network information technologies                                | 4,5     |
| Broadband radio communication                                   | 4,5     |
| Satellite communication systems                                 | 4,5     |
| IoT security and privacy  | 4,5     |
| Networking software   | 4,5     |
| Analysis of computer systems                                    | 3       |
| Designing and diagnosing systems for critical applications      | 4,5     |
| Optimal and adjustable control systems                          | 4,5     |
| Protection of information in mobile communication               | 4,5     |
| Applied analysis of software systems                            | 4,5     |
| Methodology of development of intellectual IP                   | 4,5     |
| Cloud architecture of building information systems              | 4,5     |
| Research and design of computer systems and networks            | 4,5     |
| Computational intelligence                                      | 6       |
| Scientific research and inventive activity in IT                | 6       |
| Robotic systems and complexes                                   | 6       |
| Service-oriented architecture of distributed systems            | 6       |
|   |         |
| Total amount of credits   | 30      |

### Recommended study plan for Master DD Program Students of the OPNU

| 1. Semester       | 2. Semester            | 3. Semester       | 4. Semester                  |
|-------------------|------------------------|-------------------|------------------------------|
| (winter semester) | (summer semester)      | (winter semester) | (summer semester)            |
|                   |                        |                   | Study at OPNU or at HSA      |
| Study at OPNU     | Study at OPNU          | Study at HSA      | 16.02 - 29.06/30.09          |
| 01.09. – 31.01.   | 01.02. – 29.06./30.09. | 01.10. – 15.02.   | work on the Master's thesis, |
|                   |                        |                   | colloquium                   |

### Conversion rule of the module grades acquired at the OPNU and at HSA

| Grades OPNU | Grades HSA |
|-------------|------------|
| 0-59        | 5,0        |
| 60-61       | 4,0        |
| 62-64       | 3,7        |
| 65-67       | 3,3        |
| 68-70       | 3,0        |
| 71-73       | 2,7        |
| 74-79       | 2,3        |
| 80-84       | 2,0        |
| 85-89       | 1,7        |
| 90-95       | 1,3        |
| 96-100      | 1,0        |