| Module             | Foundation   | s of Inform | nation S     | ystems | Security    |      |  |
|--------------------|--|-------------|--------------|--------|-------------|------|--|
| MA-INF 3228        |  |             |              |        |             |      |  |
| Workload           | Credit points  | Duration    | Freque       | ncy    |             |      |  |
| 180 h              | 6 CP   | 1 semester  | r every year |        |             |      |  |
| Module             | PD Dr. Adrian Spalka   |             |              |        |             |      |  |
| coordinator        |  |             |              |        |             |      |  |
| Lecturer(s)        | PD Dr. Adrian Spalka   |             |              |        |             |      |  |
| Classification     | Programme  |             | Mode         | Semest | Semester    |      |  |
|                    | M. Sc. Computer Science  |             | Optiona      | l   1. | 1.          |      |  |
| Technical skills   |  |             |              |        |             |      |  |
| Soft skills        |  |             |              |        |             |      |  |
| Contents           | The security of networked information systems depends on four  |             |              |        |             |      |  |
|                    | factors: authenticity, availability, confidentiality and integrity.  |             |              |        |             |      |  |
|                    | This lecture examines their theoretical foundations and practical  |             |              |        |             |      |  |
|                    | implementation. Along the historical development, the emphasis is put on modern information systems, such as those in the cloud. |             |              |        |             |      |  |
|                    |  |             |              |        |             |      |  |
|                    |  |             |              |        |             |      |  |
| Prerequisites      | none   |             |              |        |             |      |  |
|                    | Teaching form  | at G        | roup size    | h/week | Workload[h] | CP   |  |
| Format             | Lecture  |             | 60           | 2      | 30 T / 45 S | 2.5  |  |
|                    | Exercises  |             | 30           | 2      | 30 T / 75 S | 3.5  |  |
|                    | T = face-to-face teaching; $S = independent study$   |             |              |        |             |      |  |
| Exam achievements  | Written exam   |             |              |        |             | ded) |  |
| Study achievements | Successful exercise participation (not graded)   |             |              |        |             |      |  |
| Forms of media     | Most content will be hand-written on the board with the  |             |              |        |             |      |  |
|                    | supplement of a few slides. There are no handouts.   |             |              |        |             |      |  |
| Literature         | A text-book on cryptography is advisable.  |             |              |        |             |      |  |