<table>
<tr><td colspan="6"><b>System Security</b></td></tr>
<tr><td><b>Course Code</b>
CIF62030</td><td><b>Student Workload</b>
90 hours</td><td><b>Credits</b> (according to ECTS)
4.5</td><td><b>Semester</b>
Sem. 6</td><td><b>Frequency</b>
each even-semester</td><td><b>Duration</b>
16 meetings</td></tr>
</table>

<table>
<tr><td>1</td><td><b>Types of courses</b>
<i>elective</i></td><td><b>contact hours</b>
63 hours</td><td><b>independent study</b>
27 hours</td><td><b>class size</b>
40 students</td></tr>
<tr><td>2</td><td colspan="4"><b>Prerequisites for participation</b>
Completed Information Security.</td></tr>
<tr><td>3</td><td colspan="4"><b>Learning outcomes</b>
Students are able to explain system security fundamental concept.
Students are able to explain ethical hacking fundamental concept.
Students are able to demonstrate the ability to analyze system vulnerability.
Students are able to demonstrate the ability to implement penetration testing.
Students are able to explain malware threats concept.
Students are able to demonstrate the ability to implement session hijacking.
Students are able to explain server web and application web security fundamental concept.
Students are able to demonstrate the ability to implement SQL Injection.
Students are able to explain mobile platform security fundamental concept.
Students are able to explain IoT security fundamental concept.
Students are able to explain cloud security fundamental concept.
Students are able to demonstrate the ability to implement access control.
Students are able to explain authorization models.
Students are able to demonstrate the ability to implement cryptography for system security.</td></tr>
<tr><td>4</td><td colspan="4"><b>Subject aims</b>
IF-PLO-3
Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements.
IF-PLO-7
Mastering the theoretical concept and principles of computer science, especially in the aspect of algorithms, programming, intelligent systems, information management, parallel and distributed computing, information security, human-computer interaction, software engineering, and fundamentals of computer systems and networks.
IF-PLO-11</td></tr>
</table>

	Graduates are able to plan, develop, manage, and analyze the computer network-based system and the services running on top of them by considering the network security aspects.
5	**Teaching methods** lectures, case study, class discussion, presentation
6	**Assessment methods** assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment
7	**This module is used in the following degree programs as well**
8	**Responsibility for module**
9	**Other information** Certified Ethical Hacker v10, EC-Council Whitman, Michael E.& Mattord, Herbert J. (2014). Principles of Information Security (5th Edition), Cengage Learning.