

<b>Course title</b>	<b>Code</b>	<b>semester</b>	<b>T+U</b>	<b>credit</b>	<b>ECTS</b>
System Programming	YM606	6	3+ 0	3	4
<b>Prerequisite Courses</b>	None				
<b>Language of the Course</b>	English				
<b>Course Level</b>	Undergraduate				
<b>Type of Course</b>	Optional				
<b>Course Coordinator</b>					
<b>Instructors</b>					
<b>Course Assistants</b>					
<b>The aim of lesson</b>	System programming using operating system core system calls To learn and apply the methods.				
<b>Course Content</b>	Design and implementation of various system software. Machine architecture and system relationships between software. Introduction of Windows, Unix operating systems.				
<b>Course Learning Outcomes</b>	At the end of this course, the student; 1. It uses computers with UNIX system. 2. Uses programming tools on a UNIX system computer. 3. Uses system calls and library calls. 4. Uses file and process programming calls.				
<b>Weeks</b>	<b>Topics</b>				
one	Introduction to UNIX Systems				
2	Unix File Systems				
3	Text Editors and Command Interpreter Operators				
4	Regular Expressions and the Unix Window System				
5	Unix Interpreter Environments and Script Concept				
6	Script Concept				
7	Script Programming – I				
8	Script Programming – II				
9	Regular Expressions				
10	Program Development Tools (Gcc, Make, Gdb) and Other Tools (Sed, Awk)				
11th	File Management - I (Open, Create, Read, Write, Lseek)				
12	File Management - II (Chmod, Chdir, Link, Fcntl, Ioctl)				
13	Process Management - I (Fork, Exec, Wait)				
14	Process Management - I (Fork, Exec, Wait)				
15	Basic Unix System Administration				
<b>General Competencies</b>					
In the assessments, students are expected to understand the main topics of this course and to apply in the field of engineering. uses.					
<b>resources</b>					
Rubini, A., Linux Device/Drivers, O'Reilly. Schwartz, P., (2000). Learning Perl, O'Reilly. Wall, C., (2001). Programming Perl, O'Reilly.					
<b>Evaluation System</b>					
The dates, days and hours of the Midterm Exam, Quiz, Final Exam and Evaluations will be announced later, according to the decision of the Faculty Administrative Board.					

WITH PROGRAM LEARNING OUTCOMES COURSE LEARNING OUTCOMES RELATIONSHIP TABLE											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
<b>LO1</b>	5	5	5	5	4	4	2	2	2	2	2
<b>LO2</b>	5	4	4	4	4	3	2	2	2	2	2
<b>LO3</b>	5	5	5	4	4	4	2	2	2	2	2
<b>LO4</b>	4	4	5	5	5	4	2	2	one	2	2
<b>ÖK: Learning Outcomes, OP: Program Outcomes</b>											
<b>Contribution Level</b>	<b>1 Very Low</b>		<b>2 Low</b>		<b>3 Medium</b>		<b>4 High</b>		<b>5 Very High</b>		

**Relation of Program Outcomes and Related Course**

Lesson	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
<b>System Programming</b>	5	5	5	5	4	4	2	2	2	2	2