

Course title: Basic Software Tools

Course Basic Information	
Academic Unit:	FIEK
Course title:	Basic Software Tools
Level:	Bachelor
Course Status:	Elective
Year of Study:	Semester II
Number of Classes per Week:	2+1
ECTS Credits:	5
Time /Location:	FIEK
Teacher:	Prof. Ass. Dr. Besmir Sejdiu
Contact Details:	
Course Description:	This course provides a comprehensive introduction to fundamental software tools used across various professional domains. Covering operating systems, file management, text editors, version control, productivity tools, programming fundamentals, and data management, the course aims to equip students with practical skills for efficient work in diverse environments.
Course Goals:	<ul style="list-style-type: none"> -Familiarize students with a broad range of software tools. -Provide hands-on experience in file management, coding, and collaboration. -Develop proficiency in text editors, version control, and productivity tools. -Introduce programming fundamentals and data management concepts. -Equip students with skills to navigate and utilize various collaboration tools.
Expected Learning Outcomes:	<ul style="list-style-type: none"> -Understand the roles of common software tools. -Develop practical skills in file management, coding, and collaboration. -Proficiently use text editors, version control, and productivity tools. -Gain a basic understanding of programming and data management. -Effectively use collaboration tools for communication and file sharing.
Significance and actuality of the Course	In a dynamic professional landscape, proficiency in various software tools is crucial. This course addresses the need for individuals who can navigate and utilize these tools efficiently. The practical approach ensures students are well-prepared for real-world applications. The inclusion of collaboration tools reflects the importance of effective communication and teamwork in contemporary work environments.
Student Workload (should be in compliance with student's Learning Outcomes)	

Activity	Hours	Day/ Week	Total
Lectures	2	15	30
Theory/ Lab Work/Exercises	1	15	15
Practical Work	1	5	5
Preparation for intermediary test	-	-	-
Consultations with the teacher	1	5	5
Test, seminar paper	1	10	10
Homework	1	15	15
Self-study (library or home)	1	10	10
Preparation for final exam	5	5	25
Assessment time (test, quiz, final exam)	-	-	-
Projects, presentations, etc.	1	10	10
Total			125

Teaching Methods:	30 hours of lectures + 15 hours of exercises. Approximately 65 hours of personal study and exercise including homework
Assessment Methods:	Class activity 10%, three homework assignments 40%, online tests or final exam 50% Active participation in the lectures - 5% Active participation in exercise - 5%

Primary Literature:	<ol style="list-style-type: none"> David Thomas, Andrew Hunt, The Pragmatic Programmer: Your Journey To Mastery, 20th Anniversary Edition (2nd Edition), Addison-Wesley Professional, 2019. George Beekman and Ben Beekman, Digital Planet: Tomorrow's Technology and You, Introductory (10th Edition) (Computers Are Your Future), Prentice Hall, 2011.
Additional Literature:	<ol style="list-style-type: none"> Michael J. Quinn, Computer Confluence Complete: Tomorrow's Technology And You 7th Edition, Prentice Hall, 2005.

Week	Title of the Lecture
Week 1 - 2:	Introduction to Software Tools - Overview of common software tools - Understanding the role of software tools in various fields - Introduction to operating systems (Windows, macOS, Linux, Mobile OS)
Week 3 - 4:	File Management and Navigation - File system basics - File organization and naming conventions - Command line navigation (basic commands)
Week 5-6:	Text Editors and Version Control - Introduction to text editors (e.g., Notepad++, Sublime Text) - Basics of version control using Git

	- Collaborative coding using GitHub
Week 7 - 8:	Productivity Tools - Microsoft Office Suite (Word, Excel, PowerPoint) - Diagramming and flowchart creation (MS Visio, Draw) - Google Workspace (Docs, Sheets, Slides) - Time management and task organization tools (Trello, Asana, Jira)
Week 9 - 10:	Programming Fundamentals - Introduction to programming languages (Python) - Basics of coding and debugging - Integrated Development Environments (IDEs)
Week 11 - 12:	Data Management and Visualization - Introduction to databases and data management - Basic data visualization tools (Excel charts, Tableau Public)
Week 13 - 14:	Collaboration Tools - File sharing and communication tools (Google Drive, OneDrive) - Virtual meeting platforms (Google Meet, Zoom) - Learning management systems (Google Classroom)
Week 15:	Conclusions-Summary Explanations about the exam

Academic Policies and Code of Conduct

Attending lectures and lab work is mandatory.