

Module appears in

Master's degree (1 major) Computer Science (2023)

## Module description

tion, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German) $V(2) + \ddot{U}(2)$	Module title					Abbreviation	
Holder of the Chair of Computer Science   Institute of Computer Science    ECTS   Method of grading   Only after succ. compl. of module(s)    5   numerical grade	Operat	ing Sys	stems			10-I=BS-232-m01	
ECTS   Method of grading   Only after succ. compl. of module(s)  5   numerical grade    Duration   Module level   Other prerequisites  1 semester   graduate    Contents  Introduction to computer systems, historical development of operating systems, architectural approaches, interrupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Û (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 6o to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	Module coordinator				Module offered by		
Duration Module level Other prerequisites  1 semester graduate  Contents  Introduction to computer systems, historical development of operating systems, architectural approaches, interupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	holder of the Chair of Computer Science II				Institute of Computer Science		
Duration Module level prerequisites  1 semester graduate  Contents  Introduction to computer systems, historical development of operating systems, architectural approaches, interupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language – if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	ECTS	Meth	od of grading	Only after succ. compl. of module(s)			
Introduction to computer systems, historical development of operating systems, architectural approaches, interrupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	5	nume	rical grade				
Introduction to computer systems, historical development of operating systems, architectural approaches, interupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	Duration Module level		Module level	Other prerequisites			
Introduction to computer systems, historical development of operating systems, architectural approaches, interupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language – if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)  written examination (approx. 6o to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	1 seme	ster	graduate				
rupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communication, memory management, device and file management, operating system security, operating system virtualisation.  Intended learning outcomes  Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus  Allocation of places	Contents						
Students have the knowledge and practical skills to build and use the essential components of operating systems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload	rupt processing in operating systems, processes and threads, CPU scheduling, synchronisation and communica tion, memory management, device and file management, operating system security, operating system virtualisation.						
Stems.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + Ü (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h							
Wethod of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 6o to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h	, , , , , , , , , , , , , , , , , , , ,						
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 60 to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h	Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	rman)		
written examination (approx. 6o to 120 minutes).  If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h	V (2) +	Ü (2)					
If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).  Language of assessment: German and/or English creditable for bonus  Allocation of places   Additional information  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h	<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
Additional information Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC Workload 150 h	If anno examir prox. 19	unced lation o 5 minut lge of a	by the lecturer at the beg of one candidate each (ar tes per candidate). ssessment: German and	inning of the course, oprox. 20 minutes) or			
Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h	Allocat	ion of <sub>I</sub>	places				
Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC  Workload  150 h							
SE,ES,GE,SEC  Workload  150 h	Additio	nal inf	ormation				
150 h	, =						
	Worklo	ad					
Teaching cycle	150 h			-			
	Teachi	ng cycl	е				

JMU Würzburg • generated 29.03.2024 • Module data record 141171