

B. Fundamentals

1. Overview

i. Fundamentals Computer Science

Module no.	Name of Module	Offered	Language	ECTS	Page
CS 500	Advanced Software Engineering	HWS	E	6	6
CS 530	Database Systems II	FSS	E	6	8
CS 550	Algorithmics	FSS/HWS	E	6	10
CS 560	Large-Scale Data Management	HWS	E	6	12
IE 500	Data Mining I	FSS/HWS	E	6	15
IE 560	Decision Support	HWS	E	6	17
IS 553	System Software*	MMM*	E	6	MMM*

* For a detailed description please use the module catalog of the „Mannheim Master in Management“: <https://www.bwl.uni-mannheim.de/studium/master/mmm/>

ii. Fundamentals Business Administration

All 5XX and 6XX courses from the following areas:

- Accounting and Taxation (ACC, TAX)
- Banking, Finance and Insurance (FIN)
- Management (MAN)
- Marketing (MKT)
- Operations Management (OPM)

They are listed in the module catalog of the “Mannheim Master in Management”:
<https://www.bwl.uni-mannheim.de/studium/master/mmm/>

C. Specialization Courses

1. Overview

i. CS-Courses

Module no.	Name of Module	Offered	Language	ECTS	Page
CS 600	Model Driven Development	HWS	E	6	22
CS 605	GPU Programming	HWS	E	6	24
CS 646	Higher Level Computer Vision	FSS	E	6	25
CS 647	Image Processing	HWS	E	6	28
CS 651	Kryptographie II	HWS	E	6	30
CS 652	Data Security	FSS	E	6	33
CS 654	Internet of Things Security	HWS	E	6	36

ii. IE-Courses

Module no.	Name of Module	Offered	Language	ECTS	Page
IE 630	Query Optimization	FSS	E	6	38
IE 650	Semantic Web Technologies	HWS	E	6	40
IE 661	Text Analytics	HWS	E	6	42
IE 663	Information Retrieval and Web Search	FSS	E	3	44
IE 670	Web Data Integration	HWS	E	3	46
IE 671	Web Mining	FSS	E	3	48
IE 672	Data Mining II	FSS	E	6	50
IE 674	Hot Topics in Machine Learning	FSS	E	6	52
IE 675	Machine Learning	HWS	E	6	54
IE 676	Network Analysis	HWS	E	6	56
IE 691	Information Retrieval Project	FSS	E	3	58
IE 683	Web Data Integration Project	HWS	E	3	60
IE 684	Web Mining Project	FSS	E	3	62
IE 689	Relational Learning	HWS	E	6	64

iii. IS-Courses

Module no.	Name of Module	Offered	Language	ECTS	Page
IS 510	Process Management	MMM*	E	6	MMM*
IS 512	IT Management in the Digital Age	MMM*	E	6	MMM*
IS 513	Applied IT Management in the Digital Age	MMM*	E	6	MMM*
IS 514	Process Mining and Analytics	MMM*	E	6	MMM*
IS 540	Management of Enterprise Systems	MMM*	E	6	MMM*
IS 541	Methods and Theories in Information Systems (ManTIS)	MMM*	E	6	MMM*
IS 553	System Software	MMM*	E	6	MMM*
IS 602	Business Intelligence and Management Support Systems	MMM*	E	6	MMM*
IS 607	Digital Innovation	MMM*	E	6	MMM*
IS 613	Applied Project in Design Thinking and Lean Software Development	MMM*	E	6	MMM*
IS 614	Corporate Knowledge Management	MMM*	E	6	MMM*
IS 615	Design Thinking and Lean Development in Enterprise Software Development	MMM*	E	6	MMM*
IS 621	Self-Organizing and Adaptive Systems	MMM*	E	6	MMM*
IS 629	Product Management and Product Design for Software	MMM*	E	6	MMM*
IS 651	Behavioral perspectives on E-Business	MMM*	E	4	MMM*

* For a detailed description please use the module catalog of the „Mannheim Master in Management“:
<https://www.bwl.uni-mannheim.de/studium/master-studiengaenge/mannheim-master-in-management/>

iv. International Course

Module no.	Name of Module	Offered	Language	ECTS	Page
BI 656	International Course	-	-	max. 18	69

D. Projects and Seminars

1. Overview

i. Team Project

Module no.	Name of Module	Offered	Language	ECTS	Page
TP 500	Team Project	HWS/FSS	E	12	72

ii. Scientific Research

Module no.	Name of Module	Offered	Language	ECTS	Page
SQ 500	Scientific Research	HWS/FSS	E	2	74

iii. Seminar

Module no.	Name of Module	Offered	Language	ECTS	Page
CS 701	Selected Topics in Algorithmics and Cryptography	FSS	E	4	76
CS 704	Master Seminar Artificial Intelligence	HWS/FSS	E	4	78
CS 705	Datenbankseminar	HWS/FSS	G/E	4	80
CS 707	Seminar Data and Web Science	HWS/FSS	E	4	82
CS 708	Seminar Software Engineering – Prof. Atkinson	HWS/FSS	E	4	84
CS 709	Seminar Text Analytics	HWS/FSS	G/E	4	86
CS 710	Selected Topics in Data Science	FSS	G/E	4	88
CS 715	Large-Scale Data Integration Seminar	HWS/FSS	G/E	4	90
CS 716	IT-Security	HWS	E	4	92
CS 717	Master Seminar on Computer Vision	HWS	E	4	94
CS 718	AI and Data Science in Fiction and Society	HWS	E	4	96
CS 719	Seminar on Process Analysis	HWS/FSS	E	4	98
IE 704	Seminar AI Systems Engineering	HWS/FSS	E	4	100
IS 712	Contemporary Issues in Information Systems Research	HWS/FSS	E	4	102
IS 722	Seminar Trends in Distributed Systems	MMM*	E	4	MMM*
IS 742	Seminar Trends in Enterprise Systems	MMM*	E	4	MMM*

IS 751	E-Government Adoption and Societal Change	MMM*	E	4	MMM*
IS 752	Seminar on Process and Management Analytics	MMM*	E	4	MMM*