

Information Event for Master's Students and Advanced Bachelor's Students



Faculty of Computer Science and Mathematics
Monday, 29 July 2019

- Changes in study regulations
- Master MES transition
- Course offerings in the next semester
- Seminar information
- Preliminary preview to summer 2020
- Questions, feedback and discussion

All Master's Programmes

- Plagiarism assessment: declaration of consent with screening of written work (e.g., use of anti-plagiarism software)
- Determination of a maximum duration of 6 months for the completion of master's theses (from the day of the supervisor's confirmation of acceptance until the due date)
- Academic progress: requirement for proof of at least 20 ECTS points after the first semester or 30 ECTS points after the second semester
→ Affecting newly-admitted students only

Master Mobile and Embedded Systems

- More flexibility in the choice of modules from focus areas: minimum of 20/15 ECTS points from 2 focus areas instead of 30/15/15 ECTS points from 3 focus areas
→ Effective immediately for all students

Transfer Master MES → Computer Science

- Requests to change degree programmes may now be filed year-round (instead of during the regular application periods only)
- No more need to submit formal applications through Campusportal
- Requirement: total of 110 ECTS points from relevant computer science coursework (undergraduate studies + modules from Uni Passau)
- International Coordinator provides guidance throughout the process, please make appointments for assistance: masters@fim.uni-passau.de

M.Sc. Mobile and Embedded Systems Development

- Prospective plans to integrate MES within the M.Sc. Computer Science degree programme as a newly-designed focus area
- Selection of applicants for the winter semester 2019/2020 based on a new set of requirements (60 ECTS points computer science, 20 ECTS points mathematics, 12 ECTS points electrical engineering/information technology): very few new students admitted

Focus Information and Communication Systems:

- Web of Things and Services (Käbisch/Kosch)
- Data Science Lab (Granitzer)
- Visual Analytics (Granitzer)
- Foundations of Energy Systems (de Meer)
- Semantic Technologies (Freitag)
- Database Technologies (Freitag)
- Big Data Management (Endres)
- Innovative Industrial Software (Kranz)
- Industrial Innovation Lab (Kranz)
- Ideation and Prototyping for Industrial Innovation (Kranz)
- Science and Technology Project in Physical Making, Prototyping and Testing (Kranz)

Focus Algorithmics and Mathematical Modeling:

- Algorithmic Graph Theory and Perfect Graphs (Rutter)
- Parametrised Algorithms (Rutter)
- Computational Logic (Kreuzer)
- Computer Algebra (Kreuzer)

Focus Programming and Software Systems:

- Search-Based Software Engineering (Fraser)
- Requirements Engineering (Kuhrmann)
- Empirical Methods for Software Engineering (Kuhrmann)
- Programming Styles (Gambi)
- Advanced Software Product Development (Fraser, Kuhrmann)

Focus IT Security and Reliability:

- Advanced IT Security (Posegga)
- Wireless Security (Posegga)
- Security Insider Lab I – Infrastructure Security (Posegga et al.)
- Dependable Distributed Systems (Reiser)
- Privacy Enhancing Techniques (Cuellar)
- Hardware-Oriented Security (Katzenbeisser)
- Advanced Security Engineering Lab (Katzenbeisser)

Focus Intelligent Technical Systems:

- Learning Theory (Sauer)
- Deep Learning (Krestel)

Focus General Area:

- Functional Safety (de Meer)
- IT-Sicherheitsrecht aus öffentlich-rechtlicher Perspektive (Hartl)

Focus Human-Computer Interaction

- Empirical Methods for Software Engineering (Kuhrmann)
- Visual Analytics (Granitzer)

Focus Data Processing, Signals and Systems

- Data Science Lab (Granitzer)
- Big Data Management (Endres)

Focus Systems Engineering

- Functional Safety (de Meer)
- Web of Things and Services (Käbisch/Kosch)
- Hardware-oriented Security (Katzenbeisser)
- Advanced Security Engineering Lab (Katzenbeisser)

Focus General Area:

- Foundations of Energy Systems (de Meer)
- Semantic Technologies (Freitag)
- Wireless Security (Posegga)
- Computational Logic (Kreuzer)
- Computer Algebra (Kreuzer)

Furthermore: Research Internships

Focus Algebra, Geometry and Cryptography

- Computer Algebra (Kreuzer)
- Real Algebra (Kaiser)

Focus Mathematical Logic and Discrete Mathematics

- Algorithmic Graph Theory (Rutter)
- Efficient Algorithms (Rutter)

Focus Analysis, Numerics & Approximation Theory

- Learning Theory (Sauer)
- Computerized Tomography (Diederichs)

Focus Dynamical Systems and Optimization

- Semigroup Theory (Wirth)

Focus Stochastics, Statistics

- Stochastic Analysis (Müller-Gronbach)
- Numerical Methods for Stochastic Differential Equations (Müller-Gronbach)
- Computational Statistics – Statistical Learning in R (Schnurbus)

Focus Data Analysis, Data Management & Programming

- Visual Analytics (Granitzer)
- Data Science Lab (Granitzer)
- Deep Learning (Krestel)

Focus Applications

- Financial Engineering and Structured Finance (Entrop)

- Compulsory seminars have higher priority over research seminars
- Decentralised registration at each single seminar (no longer by registration for „main seminar“ in Stud.IP)
- 10 seminars for M.Sc. Computer Science (preliminary)
- Additional seminars to be added for M.Sc. Mobile and Embedded Systems soon, changes will be announced shortly via https://studip.uni-passau.de/studip/dispatch.php/course/details?sem_id=29ee63edb1a3b474a8dfa2aa28684fea
- A current overview of seminars for winter 2019/2020 can be found at www.fim.uni-passau.de/fileadmin/files/dekanat/Seminare/General_Information_Wirth.pdf (preliminary)

M.Sc. Computer Science & M.Sc. Mobile and Embedded Systems:

- System Security (Cuellar)
- Scientific Methods and Technical Writing (Kranz)
- Programming Applications for Mobile Interaction (Kranz)
- Cloud Security (Reiser)
- Data Science Lab (Granitzer)
- Algorithms for Graph Visualisation (Rutter)

M.Sc. Computer Science:

- Practical Parallel Programming (Größlinger)
- Virtual Machines and Runtime Systems (Größlinger)
- Domain-Specific Languages (Größlinger)
- Security Insider Lab II – System and Application Security (Posegga)
- Software Analysis (Fraser)
- Innovative Industrial Software (Kranz)
- Ideation and Prototyping for Industrial Innovation (Kranz)
- Industrial Innovation Lab (Kranz)
- Science and Technology Project in Physical Making, Prototyping and Testing (Kranz)



**Thank You for Your Attention!
Any Questions or Feedback?**