

- Introduction to Computational Science and Engineering
- · Modern Programming Concepts in Engineering
- Verification, Validation, and Uncertainty Quantification
- · Mechanics of Solids
- Computational Dynamics
- Finite Element Methods in Structural Analyses
- Thermo-Fluid Dynamics
- Computational Thermo-Fluid Dynamics
- Meshfree Particle Methods
- Numerical Methods and Stochastics
- Mathematical Aspects of Differential Equations and Numerical Mathematics

CAREER FIELDS

Industry

Automotive, civil, mechanical, energy, thermal, chemical, and biomedical engineering

Research and Development Research institutes, International companies, Simulation consulting firms

Academia

Pursuing a PhD program Teaching at colleges or universities

SHAPES THE 21st CENTURY TECHNOLOGIES









BENEFITS OF THE PROGRAM

- Double Master's degrees, one from RUB (Germany) and one from VGU (Vietnam)
- English skills will be improved as a result of all teaching conducted in English.
- The highest teaching standards with an outstanding curriculum, dedicated and experienced professors from Vietnam and Germany, modern facilities and state-of-the-art engineering software.
- A network of research centers and industrial companies all over the world through our lecturers.
- Competitive advantage to be among the most sought-after experts in simulation engineering.
- · Scholarships to do Master's thesis in Germany
- Opportunities to pursue PhD research in Germany and other countries.



VGU students doing Master's theses in Germany



Ba (CompEng 2017) Doan Kieu Anh & Vu at Phaeno Science Center, Wolfsburg

Every success story relies on comprehensive preparation. CompEng program at VGU is certainly the best choice for this in Vietnam. CompEng nurtured me, a diligent and self-directed student, with diversified, state-of-the-art knowledge, and brought me to the international arena. More importantly, its prestigious academic network has been efficiently connecting students and alumni all over Asia, Europe, and America. Thanks to these advantages, I have effortlessly won various reputable scholarships, conference travel grants, and a full-time Ph.D. candidate position at the University of Luxembourg even before official graduation.

Chau Minh Vu

CompEng 2016, PhD student at Uni. of Luxembourg

The exciting challenges that I faced during my journey in CompEng helped me build up a new positive mindset towards studying. The more I engaged into my studies, the more I learned about advanced knowledge and the way my teachers approached scientific research. I greatly appreciate that the potential of female students, like myself, was promoted in the academic and gender-equality study environment of CompEng.

Doan Kieu Anh CompEng 2017

The Computational Engineering degree program at VGU is definitely a good start for one who wants to have a career in the simulation field. I find that there is a perfect blend of theory and practice, which makes the program one of the best of its kind. The university provides an ambience that enhances the learning process. Overall, it's a well-organized program for enthusiastic minds.











- Automation Engineering
- Control Engineering
- Robotic
- Sensor Technology

CAREER FIELDS

- Automation Engineering
- Robotic
- Process Engineer
- Technical Engineer
- Car Industry
- MEMs Technology
- Sensor Development
- Microcontroller

REACH YOUR FUTURE GOAL WITH OUR PROGRAM



DEGREE



Double degree Master of Science Degree from Karlruhe University of Applied Science and Vietnamese-German University

ADMISSION REQUIREMENT:

Applicants graduated with bachelor degree in relevant disciplines: Electrical Engineering, Mechanical Engineering, Mechatronics, Telecommunication, Physics, Computer Science, Information Technology, or related engineering fields.



DURATION
Full time
4 semesters in 2 Years



BENEFITS OF THE PROGRAM

- Identify, formulate, and develop scientific models for mechatronics and sensor system technology based on theoretical insights and fundamental techniques;
- Conduct feasibility studies for using mechatronics & sensor systems for solving assistive technology applications;
- Classify and synthesize currently available methods, algorithms, and software to tackle new scientific and engineering problems in mechatronics & sensor system technology:
- Design and build mechatronic & sensor systems;
- Perform simulations with given methods using commercial software (ANSYS, Mathematica, LTSpice, MATLAB, Python, etc.), or self-developed codes, or both;
- Comprehend, interpret, verify and validate simulation results; also utilize simulation results in subsequent calculations in the context of complex problems such as design optimizations related sensor technology;
- Develop new mechanism related sensors and integrate them into robotic systems in the field of production, medical or environmental engineering;
- The ability to meet international language requirements. An excellent program taught in English, packed with real-world industry cases and soft skills such as teamwork, presentation skills and problem solving skills.

ALUMNI'S TESTIMONIA

"An excellent international program with German standard Currently our company working as one of the industrial of MST program. All Professors in MSST program are very friendly, easily approachable with deep knowledge and industrial experience. The syllabus framed is excellent in terms of the content and spirit and synchronises well with the recently technology developments in the field of mechatronics and sensor technology. The laboratories and the facilities are well adequate to meet the requirements of the curriculum and scientific research. Students of MST working in our company are known for their unity, performance, their creativity and good English communication skill."

Dr. Doan Nam Thai CEO, Advanced Vision Automation Ltd.

"From my personally experience, the core contents of the MSST Master program are well tailored so that graduates will be equipped with advanced knowledge of the disciplines, scientific methods and entrepreneurial spirit which enable them to handle complex problems when working in interdisciplinary teams, to pursue a PhD program or to start their own businesses. Additionally, the VGU campus has many good facilities which support students in their engineering projects or researches, especially the library with excellent study resources. When I was working on my Master Thesis, I applied for a PhD candidate position at the Technical University of Munich (TUM), one of Europe's top universities and got the invitation letter right after I submitted my Master Degree. That is a big achievement for me personally and I have to say, the MSST Master program was the springboard which launched me towards this success. I would recommend it to anybody who is interested in automation technology, automotive engineering, sensor technology, control engineering and robot dynamics.

Nguyen Xuan Tung MSST 2015

INDUSTRY'S TESTIMONIAL







- Water Chemistry & Biology
- Urban Water Management
- Water & Wastewater Treatment and Reuse
- · Sanitation & Sludge Management
- Water Supply & Distribution Network
- Flood Management
- River Basin Management
- River Engineering
- Hydraulic Structures & Modelling
- Economics of Infrastructure

CAREER FIELDS

- The private sector
- Non-governmental organizations
- Associations and consultancies
- Design Institutes
- Operation Companies
- Research institutions
- Municipial, regional and governmental agencies
- Continue to study in an international Ph.D. program.









Admission Requirement:

Candidate should have bachelor degree in:

- Water Technology/Wastewater; Water Resource Management; Environmental Engineering or Environmental Management/ Environmental Science;
- · Civil Engineering/ Geological Engineering
- Chemical Engineering/Chemistry with a major in water/waste water technology
- Biological Engineering with a major in water/waste water technology
- Hydraulic Engineering & Hydrology
- Water Supply & Drainage Engineering
- Water Supply & Drainage Engineering or similar bachelor program

Professional Competence

Graduates will equip professional knowledge and skills (both technical and soft skills) in:

- Water & Wastewater Treatment Technology
- Operation of Wastewater Treatment Plant
- Separation Technology
- Drinking Water Technology
- Water Reuse & Energy Recovery
- Hydraulic Engineering
- River Basin Management
- Scientific Research Methodology
- Practical Knowledge & Self-Study

The 4 semester master program is offered with TU Darmstadt, one of the leading universities in Germany. Graduates of the MSc WATREMA have learned to define and describe the challenges of water and wastewater treatment, water reuse and water management of fast growing cities and rural areas in a wide range. They know methods and processes which could be able to solve such problems as well as their advantages and disadvantages. The graduates can decide which methods and processes have to be used to solve a special problem and they are also able to use such methods and processes in practice. Finally, they get the knowledge to adapt known methods and processes to develop new methods and processes to solve new problems in future. The topics of the study programme of the MSc WATREMA are extremely relevant for the sustainable developing of urban, industrial and also rural areas. The MSc WATREMA is designed for professionals operating in Vietnam, Southeast Asia, and worldwide. Potential employers include governmental, non-governmental and private sector. This comprises municipal, regional or governmental agencies or the private sector (consultants, Design Institutes, Operating Companies) in water supply, water reuse and water management in planning, construction, and also operation of water works, water treatment and water reuse plants, which will be implemented in near future in all countries in Southeast Asia.









ADMISSION REQUIREMENT

Information Technology, Telecommunications, Computer Science, Computer Engineering or related fields;

DURATION

2 years full time (4 semesters) Study in Germany for six months or one year (Optional)





DOUBLE DEGREE MASTER OF SCIENCE

English-language master study program at Darmstadt University of Applied Sciences (h-da) and Vietnamese-German University (VGU)

MAJOR SUBJECTS

Semester 1

- Computer Forensics
- Cryptography
- IT Security Management and Compliance
- Selected Topics in **IT Security**
- Culture and Languages

Semester 3

- Usable Security
- Big Data Technologies
- Logic
- Project System **Development 2**
- Advanced Seminar

Semester 2

- Security Protocols and Infrastructures
- Advanced Topics in **Digital Forensics**
- Biometric Systems
- Project System Development 1
- Economical and Social Management

Semester 4

Master Thesis

CAREER OPPORTUNITIES

Hardware and Network Security **Expert, Information Technology** Security Master and Data Security/Cryptography expert work in:

- IT Security and Cyber security Companies
- Security Department of Information Technology and **Software Development** companies
- Companies specialized in security devices, smart devices, smartphones, smart homes, smart manufacturing system.

SAFETY FIRST, SECURITY ALWAYS





The graduates:

- Have an absolute certainty in applying and implementing professional and inter-disciplinary competences.
- · Have broad specialized knowledge on the subject area of Information Technology, especially of the IT-Security.
- have necessary depth and broadness in order to get used to the techniques of the own and adjoining specialized fields in future.
- · Are able to implement the acquired skills and knowledges to formulate and solve complicated tasks of the Information Technology (especially of the IT-Security) both in practice and in application-oriented research, to examine them critically and to develop them further when required.
- · Have acquired various technical, methodical and social competences that prepare them for leading activities
- Become acquainted with scientific works in application-oriented research.



The Master of Science programme IT Security specializes in the design, analysis and implementation security systems with Cryptography, Hardware Security, Software Security and System Security as its core areas. The program prepares professionals to implement scientific methods and knowledge in processing to solve informatical difficulties and complicated problems in practice and application-oriented research. study program's application and project orientation are reflected in a wide range of elective modules with a specific focus on research questions of the IT-Security.

Program Coordinator: Assoc. Prof. TUAN DUC NGUYEN Email: duc.nt@vgu.edu.vn









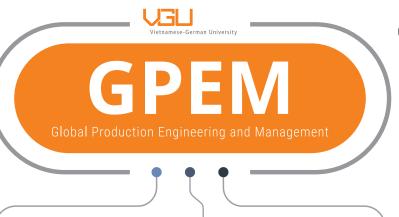
- Product Development
- · Organization and Factory Management
- Assembly & Automation Technology
- Production Technology
- Quality Management and Metrology
- Additive Manufacturing
- International Project Management
- Technology and Innovation Management
- Manufacturing and Factory Planning
- Simulation of Production Systems
- Information Systems Management
- · Supply Chain Management
- Industrial Projects

CAREER FIELDS

- Product & Process Design
- Innovation & Entrepreneurship
- Global Supply Chain Management
- Production & Technology Management
- Quality Assurance
- Facilities Planning
- · Lean & Six sigma
- Research & Development
- Apply for Doctoral program

ENGINEERING FOR A SUSTAINABLE TOMORROW







DOUBLE DEGREE



Master of Science in Global Production Engineering and Management from Technical University of Berlin, Germany and Vietnamese-German University, Vietnam.

ADMISSION REQUIREMENT:

Applicants graduated with bachelor degree in relevant disciplines: Engineering, Technology, or a bachelor in other disciplines plus working experience in production.



DURATION
Full time
4 semesters in 2 Years



BENEFITS OF THE PROGRAM

- Project management and soft skills will be developed through teamwork and presentations delivered by dedicated and internationally experienced professors and lecturers.
- English skills will also be improved as a result of all teaching conducted exclusively in English.
- The gained knowledge and qualification through participation in the study program allows our alumni to access high technology-oriented companies and organizations and enables them to be entrepreneurs or excellent manager.
- Thanks to the variety of modules and topics highlighted in the course of study and the possibility for students to set their own focus, solve problems by themselves, graduates can work as engineers in the project or production industry, consultancy field, in the policy area, at training and research facilities



"Adidas and VGU cooperation started in 2013 when the first GPEM program opened in Vietnam by VGU. It has perfectly met our needs in building talents in engineering and technical fields. We are aiming for qualified resources who will be equipped with the knowledge and skills necessary to undertake management positions in manufacturing, engineering and quality management. From 2013, Adidas

together with our Partners have sponsored 73 (seventy-three) GPEM master scholars with 100% tuition fee and job offered after graduation. Through GPEM program we're making the great progress of People development and building the next generation to advance our future manufacturing. We will remain committed to cooperate closely with VGU and very much look forward to creating our own future sporting goods industry."

Mr. Gary Nguyen Adidas Group





"From an shoe developer with finance background, applying and getting scholarship from adidas's supplier to attend Global production Engineering and Management (GPEM) program in Vietnamese – German University (VGU), then going to Technical University of Berlin, Germany for master thesis has been an amazing journey that I experienced for two years in VGU. Every effort in GPEM course is just

for one thing, that is the best education, the creation of qualified generations who will be valuable candidates in the field of engineering and production managements. It let you know no matter who you are, where you from, only your dedicated efforts and gained knowledge will distinguish you from the rest. Now, it's time to light yourself on fire with passion, do your best to actively create amazing miracles in your own life, because miracle is another name for the dedicated efforts."

Nguyen Thi Thanh Thuy GPEM Intake 2017









- Distributed Systems
- Computer Networks
- System Architecture
- Business Intelligence
- Database Systems
- · Management Skill in IT
- · Business Process Management
- Finance and Controlling
- Marketing Communication
- Intercultural Management

CAREER FIELDS

- Design & Product
- Development
- Drive & Automotive Engineering
- Automation Engineering
- Production Planning & Control
- Process Engineering
- Sales & Service Engineering
- · Research & Development

MASTERING INTERNATIONAL BUSINESS TECHNOLOGIES

HEILBRONN UNIVERSITY

CERTIFIED BY THE GERMAN ACCREDITATION AGENCY



DEGREE





Double degree Master of Science Degree in Business Information Systems from Heilbronn University and Vietnamese-German University

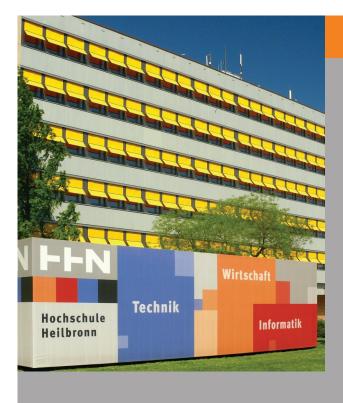
ADMISSION REQUIREMENT:

Applicants graduated with bachelor degree in relevant disciplines: Business, Information Technology, Compute Sciences, or related engineering fields. Computer



DURATION Part time

Block courses on weekends and evenings



BENEFITS OF THE PROGRAM

Guided by experienced German professors and international experts, our graduates of previous intakes have been proven to have a comprehensive knowledge of business analysis, accounting, marketing, as well as the use with be a crucial training goal of the study program and student also learn

In a concentrated, practical approach, students will be trained to analyze the business information flow of a company – particularly in the industrial sector – and to develop competent concepts for the creation of optimal business processes by applying ERP systems and business intelligence.

Graduates of the Master program in Business Information Systems are supposed to hold management position with decision making responsibility in international corporates. They are also fully qualified for an academic career with the perspective to become a researcher and get a Ph.D. Degree in Germany. Furthermore, many of our alumni have been able to successfully build up their own company.

"I had a chance in June 2019 to hold a two-day workshop at VGU with the BIS faculty. Participants have surprised me by being proactively and creatively engaging during the workshop. That was very interesting. I think I will come back next year for further activities. I believe that VGU is a excellent university which can offer the students a great academic environment to study and experience".

Dr. Erik Wende CEO of EWERK Digital GmbH, Germany

ALUMNI'S TESTIMONIAI



"I am working at SAP Labs Vietnam, a SAP's Research & Development Centre founded in 2011 with the main focus on HANA Platform development. Holding a DAAD scholarship to study in Germany for 6 months gave me great experiences on German University environment, German and international cultures when studying with international students coming from different countries all over the world. I had chances to visit and talk to many big management and IT consulting compaand Innovative technology Start-Ups in Germany as well."

Nguyen Trong Nghia BIS2016, DAAD scholarship holder







- Managerial Economics
- Financial Management
- · Marketing Management
- Market Research
- Human Resource Management
- Organisational Behaviour
- Supply Chain Management
- International Business Communication
- Innovation and Entrepreneurship
- Business Design Thinking
- Business Research Methods
- Data Analysis
- Master Thesis

CAREER FIELDS

- Entrepreneurship
- Small to Medium Enterprise (SME) Owners
- SME Management
- Branch Management at MNCs
- Management Consulting
- Leadership positions in ODAs and NPOs

DEVELOPING • BUSINESS • LEADERS







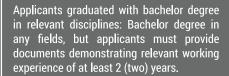
DOUBLE DEGREE





Master Degrees in Business Administration from Leipzig University, Germany and the Vietnamese-German University (VGU).

ADMISSION REQUIREMENT:





DURATION
Part time, 4 semesters in 2 Years
(4 weeks in Germany)



BENEFITS OF THE PROGRAM

- Prestigious and internationally recognized MBA degree conferred by both Leipzig University, Germany and VGU.
- Advanced managerial knowledge, understanding, and skills delivered by highly qualified, knowledgeable, and experienced German and other international professors and lecturers.
- All modules are delivered in English.
- Well-developed modules focusing on the improvement of soft skills and critical thinking skills using real-world business case studies.
- Competitive advantages in the job market with blended skills in business, international social competencies, problem solving, and English language skills.
- · Possibilities to apply for doctoral degrees.
- A flexible part-time MBA program, with a global outlook, delivered in Ho Chi Minh City.
- IELTS classes facilitated by native English speakers.



"I was proud to be a student of the MBA SEPT program at VGU. The knowledge gained from my study completely supports me in my current role with a European software company. The enjoyable and applicable contents of innovation and business development modules led me to the next level on my career. I have already introduced some friends to this program and will keep doing so with others. This is not only because of the affordable tuition fees but also the value gained after 2 years at VGU."

Son Pham MBA 2014, Spring Agency



UNIVERSITÄT LEIPZIG





SUSTAINABLE URBAN DEVELOPMENT SINCE 2009 Website: apply.vgu.edu.vn Email: masterinfo@vgu.edu.vn

MAJOR SUBJECTS

Semester 1: Vietnam

- Laws on Property and Planning
- Research Methodology
- Geographic Information System
- Urban Development and Architecture

Semester 2: Germany

- Water in Urban Development
- Valuation Methods
- Green Buildings
- Infrastructure
- Urban Construction Technologies

Semester 3: Vietnam

- Urban-Rural Partnerships
- Instruments of Spatial Planning
- Urban Development Governance
- Multidisciplinary Project

Semester 4: Vietnam/Germany

Master Thesis

CAREER FIELDS

- International Consulting Companies
- Developer's Project Development
- Academic Career
- NGOs
- Urban Authorities
- International Organizations on Urban Affairs

SHARE YOUR CAREER AT VGU,
AND WHENEVER IN THE WORLD YOU MAY BE AFTER ALL, LEAD!



DEGREE



Joint English-language master study program at Technical University of Darmstadt (TU Darmstadt) and Vietnamese-German University (VGU)

ADMISSION REQUIREMENT:

Applicants graduated with bachelor degree in relevant disciplines: Business, Information Technology, Computer Sciences, or related engineering fields.



DURATION

Full time 4 semesters/2years

- Semester 1st,3rd,4th in Vietnam
- Semester 2nd in Germany

BENEFITS OF THE PROGRAM

SHARE YOUR CAREER AT VGU, AND WHENEVER IN THE WORLD YOU MAY BE AFTER ALL, LEAD!

- Managing complex urban development processes at regional, city-wide, neighbourhood and construction project level
- Leading and working in interdisciplinary and intercultural groups
- Broad method expertise to
 - cover engineering, economic, ecological and social approaches
 - identify current problems and develop and implement sustainable urban development solutions from current diverse problems
- Integration of urban-environment relations
- Practical Orientation
 - Variety of excursions to interesting sites for urban development in Germany and Vietnam
 - Realistic development case study in Ho Chi Minh City region via "Multi-disciplinary Project"

"Sustainable Urban Development Master Program covering different aspects has provided students solid understanding and a holistic approach to address urban development issues. Besides benefiting from international learning and researching environment, the high possibility of applying academic knowledge to practices well supports to my professional career. As an urban planning architect working with Vietnamese context in an international consulting firm, I strongly believe that sharing and collaborating between local knowledge and international experience is an effective way to make positive and sustainable changes – Think globally – work locally"

Pham Tuan Nam SUD 2017 ALUMNI'S TESTIMONIAI

"The SUD program at VGU has been an incredible growth experience for me, as the program familiarizes students all aspects of urban development. Even better, there is not a better city to study and be around transformative urban growth, than Ho Chi Minh City. It's exciting to witness the growth of the city, and even more exciting to be a part of it!"

Kevin Kelsey SUD 2018



DAAD scholarship holders intake 2014 in TU Darmstadt, Summer 2016

ALUMNI'S TESTIMONIAL