



الجامعة الألمانية للتكنولوجيا في عمان  
German University of Technology in Oman

# GRADUATE Programmes





# About GUTECH

GUtech is a private university established in 2007 in Oman. While offering undergraduate and graduate programmes, GUtech strives to be a leading university of technology and innovation.

At GUtech, we are proud of our approach to teaching, the diversity of our academic faculty, and our international collaborations and partnerships.

While our internationally accredited Bachelor programmes are designed by our affiliate RWTH Aachen University in Germany, our newly introduced Master programmes have been put together in close collaboration with reputable European universities, including Hasselt University in Belgium, RWTH Aachen University in Germany, Brescia University in Italy, and Vienna University of Business and Economics in Austria.

The standard of education at GUtech is equivalent to that received at established and reputable universities in Europe, the United States or Australia. Our students are taught by GUtech faculty from different countries, supported by visiting professors from RWTH Aachen University and other renowned Universities in Europe and beyond. Our teaching staff are selected for their international expertise, giving you a truly international approach to your studies, here in Oman.

Our dynamic and vibrant campus has a diverse population from Oman and from 25 different countries. It also offers state-of-the-art facilities, dedicated labs and workshops, a well-resourced library with access to RWTH Aachen library in Germany, multiple classrooms and halls, as well as sports and housing facilities.



# Why **GUtech** Graduate Programmes are right for you

- **You're a recent graduate**  
looking to kick-start your career
- **You're an aspiring professional**  
ready for the next step in your career

- **You're an experienced professional**  
looking for a new challenge

Whatever the reason, have a look through  
and see which programme is right for you.





# Master of Science in Architecture & Urban Planning

## ESSENTIAL INFORMATION

**Degree**

: Master of Science in Architecture and Urban  
Planning (MSc AUP)

**Specialisations**

: Architecture; Urban Planning

**Credits**

: 120 ECTS credit points

**Mode**

: Block Format (4 Days once a month)

**Language of Instruction** : English



# About Programme

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The Master of Science in Architecture and Urban Planning (MSc AUP) at GUTech is the first programme in Oman and the region to offer both Architecture and Urban Planning as specialisations.

The programme capitalises on the expertise of the faculty of Architecture and Urban Planning in RWTH Aachen University and draws from the know-how of GUTech faculty behind the internationally accredited undergraduate programme in Urban Planning and Architectural Design.

The MSc AUP degree encompasses 120 ECTS credit points and has been specifically designed to train fresh graduates and professionals to address the challenges of a rapidly urbanised world by seeking innovative approaches in the built environment.

The specialisations, Architecture and Urban Planning, equally address societal, environmental, economic and cultural questions but react to them on different scales.

‘Architecture’ specialisation focuses on the constructive, cultural and climatic qualities of buildings and their surroundings. It offers a sustainable outlook on new materials and technologies and hones your skills in built environment designs. Teaching in the ‘Architecture’ specialisation encourages students to develop creative and innovative building projects to address technical and social challenges encountered in the built environment.

‘Urban Planning’ specialisation is concerned with the design and planning qualities at the neighbourhood, town and regional levels. It involves an in-depth outlook on urban design issues by combining three theme-based courses and studios (Performance, Identity, Urbanity). Teaching in the ‘Urban Planning’ specialisation encourages students to integrate social and economic perspectives to plan for spatial sustainable developments.

The MSc AUP gives candidates the opportunity to design their own projects in a collaborative work environment, supported by an international faculty with outstanding achievements in the fields of architecture, urban design, urban and regional planning, heritage conservation and landscape architecture.

Candidates may choose to join the programme on a full-time or part-time basis. Classes are organised in a flexible mode format, allowing working professionals to study while pursuing their careers.

Upon completion of the MSc AUP programme, you will be ready to pursue careers in architecture or urban planning or seek new directions such as project management, urban design, and others. Aside from industry, you may go on to pursue consultancy or research careers, whether through doctoral study in academia or commercial research.

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## APPLICATION REQUIREMENTS

If you wish to apply for the Master of Science in Architecture and Urban Planning, the following items are required:

- ◆ Bachelor degree transcript
- ◆ Evidence of English language competence
- ◆ CV
- ◆ Two references
- ◆ Copy of ID card, front and back, or your passport
- ◆ Bachelor approval from Ministry of Higher Education if your degree was not issued in Oman
- ◆ Photo
- ◆ RO 100 application fee

Do you have questions about the admission and the application requirements?  
please send your enquiry to  
[graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## COST OF PROGRAMME

- ◆ A non-refundable fee OMR 100 is required prior to application being processed.
- ◆ The total credit points required to complete and obtain MSc AUP is 120 ECTS credit points. Fees are calculated on the basis of OMR 115 per ECTS CP. The total cost of the programme is OMR 13,800.

## ADMISSION REQUIREMENTS

- ◆ A recognised Bachelor degree in architecture, urbanism, or equivalent fields of study.
- ◆ Applicants without a Bachelor degree are required to
  - Hold a Diploma (or equivalent) of not less than 2 years of study
  - Be at least 25 years of age
  - Have a minimum of 6-years of work experience
- ◆ Minimum GPA: 2.5 on a scale of 4. Applicants with a GPA between 2.0 and 2.5 is admitted in exceptional cases
- ◆ Adequate proof of English proficiency (e.g. TOEFL 76 internet-based test, IELTS 6.0 or equivalent).

## INTERVIEW

Offers of admission to the MSc AUP are issued without an interview. However, this may be required from applicants who have a Bachelor degree in a discipline not directly related to the field of study.

## SCHOLARSHIP OPPORTUNITIES

Scholarship opportunities amounting up to 50% reduction in fees are available to all applicants, Omani and international.



# PROGRAMME OUTLINE

SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4
SUSTAINABILITY	CULTURE	ECONOMICS	THESIS PREPARATION
RESEARCH METHODS	DESIGN THINKING	PROJECT MANAGEMENT	THESIS COLLOQUIUM
ELECTIVE	STRUCTURAL DESIGN	ELECTIVE	THESIS
TECHNICAL SYSTEMS	ADVANCED BUILDING CONSTRUCTION 1	ADVANCED BUILDING CONSTRUCTION 2	
ANALYSIS	HISTORY	THEORY	
SIMULATION	BIM	VISUALIZATION	
STUDIO 1	STUDIO 2	STUDIO 3	
BLOCK COURSE ARCH + URB	BLOCK COURSE ARCH	WEEKEND OR AFTER WORK	





# Master of Science

## Applied Geosciences

### ESSENTIAL INFORMATION

<b>Degree</b>	: Master of Science in Applied Geosciences
<b>Sepcialisations</b>	: Hydrogeology; Petroleum Geology; and Mineral Resources
<b>Credits</b>	: 90 ECTS credit points
<b>Mode</b>	: Block Format (4 Days once a month)
<b>Duration</b>	: Approximately 18 months
<b>Language of Instruction</b>	: English



# About Programme

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The Master of Science in Applied Geosciences (MSc AGEO) at GUTech is a highly practical programme that helps you build on your knowledge and prepare for your next professional move. With a faculty of leading academic researchers from GUTech, RWTH Aachen University, and experts from universities worldwide, the programme is designed to drive your advancements in one of these specialisations: hydrogeology, petroleum geology, or mineral resources.

The specialisation in hydrogeology will prepare you to master approaches to design pumping and recharging wells, apply analytical and numerical modelling to groundwater flow, learn hydrogeological testing methods and their applications, and apply geological field methods to groundwater challenges.

The specialisation in petroleum geology will prepare you to master seismic modelling, seismic attributes and quantitative interpretation techniques, gain 2D and 3D seismic interpretation experience in a workstation environment, master approaches to field development planning and production for an oil/gas accumulation, assess and manage reserves of an oil/gas field, and to learn principles of basin modelling and

the main functionalities of basin modelling software, as well as to understand and interpret geochemical information and to evaluate geochemical technical reports.

The specialisation in mineral resources will prepare you to master sampling methods and analytical tools used for the exploration of mineral resources, will introduce you to methods for exploring natural and industrial minerals, to interpretation of mineral exploration data and to understand technical reports, and to get insights into the mineral potential of Oman and the Gulf Region, as well as the interpretation of geoelectrical, gravity and geomagnetic data at the scale of mineral deposits.

Upon completion of the MSc AGEO, you will have gained practical knowledge to generate and implement laboratory work, field work, and numeric process simulations in various industries including the petroleum industry in the Middle East and elsewhere, the mining industry, as well as in water supply and distribution sector. You may also go on to pursue consultancy as well as research careers, whether through doctoral study in academia or commercial research.

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## ADMISSION REQUIREMENTS

- ◆ Applicants must hold a recognised Bachelor degree in geosciences, physics, petroleum engineering, environmental sciences, or equivalent fields of study. In some instances, relevant work experience can compensate for derivation from a narrowly related field of study. Holders of environmental engineering degree can be considered subject to the outcome of interview with the programme coordinator.
- ◆ Applicants without a Bachelor degree are required to
  - Hold a Diploma (or equivalent) of not less than 2 years of study
  - Be at least 25 years of age
  - Have a minimum of 6-years of work experience
- ◆ Minimum GPA: 2.5 on a scale of 4. Applicants with a GPA between 2.0 and 2.5 is admitted in exceptional cases
- ◆ Applicants must provide adequate proof of English proficiency (e.g. TOEFL 76 internet-based test, IELTS 6.0 or equivalent).

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## INTERVIEW

Offers of admission to the MSc AGEO are issued without an interview. However, this may be required from applicants who have a Bachelor degree in a discipline not directly related to the field of study.

## APPLICATION REQUIREMENTS

If you wish to apply for the Master of Science in Applied Geosciences, the following items are required:

- ◆ Bachelor degree transcript
- ◆ Evidence of English language competence
- ◆ CV
- ◆ Two references
- ◆ Copy of ID card, front and back, or your passport
- ◆ Bachelor approval from Ministry of Higher Education if your degree was not issued in Oman
- ◆ Photo
- ◆ RO 100 application fee

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## SCHOLARSHIP OPPORTUNITIES

Scholarship opportunities amounting up to 50% reduction in fees are available to all applicants, Omani and international.

## COST OF PROGRAMME

- ◆ A non-refundable fee OMR 100 is required prior to application being processed.
- ◆ The total cost of the programme is OMR 13,800.

# PROGRAMME OUTLINE

1	<ul style="list-style-type: none"> <li>◆ Principles of Natural Resource Studies   Applied Sedimentology and Stratigraphy</li> <li>◆ Tectonics and Structural Geology   Mathematics for Geoscientists</li> </ul>		
2	<ul style="list-style-type: none"> <li>◆ Water Resources   Mineral Resources   Petroleum Resources   Scientific Programming</li> </ul>		
3	<ul style="list-style-type: none"> <li>◆ Geology Field Course   Applied Geophysics   Applied Geostatistics</li> <li>◆ Scientific Writing and Research Methods</li> </ul>		
	Hydrogeology	Petroleum Geology	Mineral Resources
4	<ul style="list-style-type: none"> <li>◆ Hydro-geochemistry</li> <li>◆ Fundamentals of Hydro Engineering</li> <li>◆ Hydrogeological Modelling</li> <li>◆ Practical Project</li> </ul>	<ul style="list-style-type: none"> <li>◆ Seismic Interpretation</li> <li>◆ Production Geology &amp; Reservoir Engineering</li> <li>◆ Advanced Geophysics</li> <li>◆ Practical Project</li> </ul>	<ul style="list-style-type: none"> <li>◆ Exploration Geochemistry</li> <li>◆ Ore Deposits</li> <li>◆ Exploration Geophysics</li> <li>◆ Practical Project</li> </ul>
5	<ul style="list-style-type: none"> <li>◆ Geothermics</li> <li>◆ Hydrogeological Field Methods</li> <li>◆ Hydraulic Testing and inverse Modelling</li> <li>◆ Assigned Project</li> </ul>	<ul style="list-style-type: none"> <li>◆ Petroleum Systems Analysis/ Modelling</li> <li>◆ Petrophysics and Well log Analysis</li> <li>◆ Prospect Analysis</li> <li>◆ Assigned project</li> </ul>	<ul style="list-style-type: none"> <li>◆ Fundamentals of Mining Engineering</li> <li>◆ Ore Mineralogy</li> <li>◆ Modelling and Evaluation of Orebodies</li> <li>◆ Assigned Project</li> </ul>
6	Master's Thesis		





# Master of Business Administration (MBA)

## GUtech – WU Double Degree

### ESSENTIAL INFORMATION

<b>Degree</b>	: Master of Business Administration
<b>Credits</b>	: 80 ECTS credit points
<b>Mode</b>	: Block Format (4 Days once a month)
<b>Duration</b>	: Approximately 18 months
<b>Language of Instruction</b>	: English

# About Programme

“

Today's employers are on the lookout for MBA candidates who have the competencies and the skills necessary for a highly competitive business environment.

Our MBA is an international double degree programme that brings together the outstanding international status of the Executive Academy at Vienna University of Economics and Business (WU) and the Faculty of Business and Economics at GUTech with its full understanding of the Omani economic landscape.

The GUTech-WU MBA encompasses 80 ECTS credit points and has been specifically designed for working professionals seeking to embrace current business challenges in a complex and increasingly connected business environment where companies are expected to adapt to constant changes.

Building on the latest business theories and disciplines, the double degree enables candidates to acquire practical and academic knowledge in management, organisation, strategy and finance.

The GUTech-WU MBA programme is structured to impart knowledge through a diverse and exciting modular blended learning approach, including case studies, business simulations, presentations and interactive class work. The modules of the programme include core business modules that enable you to deepen

your knowledge and sharpen your competencies and skills for various industries and sectors.

All modules are taught in English by highly experienced staff from both universities. Teaching will take place in and outside GUTech campus over four days, from Thursday to Sunday.

All candidates will be supported during a pre-module and post-module phase to prepare for the module and meet its requirements. In addition to the modules, candidates are required to write a thesis under the supervision of either a GUTech or WU faculty.

Candidates of the GUTech-WU MBA may choose to complete some modules at our partner university in Vienna.

Upon successful participation in the programme candidates will earn a locally recognised GUTech MBA degree and an internationally accredited WU degree.

Intakes for our double degree, GUTech-WU MBA, take place in March.

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## ADMISSION REQUIREMENTS

- ◆ A recognised Bachelor degree.
- ◆ Applicants without a Bachelor degree are required to
  - Hold a Diploma (or equivalent) of not less than 2 years of study
  - Be at least 25 years of age
  - Have a minimum of 6-years of work experience
- ◆ Minimum GPA: 2.5 on a scale of 4. Applicants with a GPA between 2.0 and 2.5 is admitted in exceptional cases
- ◆ Adequate proof of English proficiency (e.g. TOEFL 76 internet-based test, IELTS 6.0 or equivalent).
- ◆ Three years of relevant work experience.
- ◆ Applicants will be selected considering their academic background, skills, work experience and an interview outcome.

## INTERVIEW

Offers of admission to the GUtech-WU MBA requires applicants to pass an interview. This helps us advise you properly on the suitability of the programme to your professional and career needs. Upon successful submission of your application and the supporting documents, our Admission team will advise you on the date and time of the interview.

## COST OF PROGRAMME

- ◆ A non-refundable fee OMR 100 is required prior to application being processed.
- ◆ The total cost of the programme is OMR 15,000.

## APPLICATION REQUIREMENTS

If you wish to apply for the GUtech-WU MBA, the following items are required:

- ◆ Bachelor degree transcript.
- ◆ Evidence of English language competence.
- ◆ CV, showing at least 3 years work experience.
- ◆ Two references from employers, one being your current line manager. A form will be provided for this.
- ◆ Copy of ID card, front and back, or your passport.
- ◆ Bachelor approval from Ministry of Higher Education if your degree was not issued in Oman.
- ◆ Bachelor approval confirmation from the Austrian Honorary Counsel if your degree was not issued in Europe.
- ◆ Photo.
- ◆ RO 100 application fee.

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## SCHOLARSHIP OPPORTUNITIES

Scholarship opportunities amounting up to 30% reduction in fees are available to all applicants, Omani and international.

# PROGRAMME OUTLINE

Month 1	Month 2	Month 3	Month 4	Month 5
Managing People & Organizationsa	Financial Management	Advanced Financial Management	Competitive Analysis & Strategy	Strategic Marketing Management
5 ECTS      WU	5 ECTS      WU	5 ECTS      WU	5 ECTS      WU	5 ECTS      WU
Month 6	Month 7	Month 8	Month 9	Month 10
Managerial Economics	Operations Management	Entrepreneurship & Innovation	Business & Society	Business Intelligence & Analytics
5 ECTS      WU	5 ECTS      WU	5 ECTS      WU	5 ECTS      WU	5 ECTS      GU
Month 11	Month 12	Month 13	Month 14-18	
International Business	Logistics & Supply Chain Management	Business Laws & Regulations in Oman	Master Thesis	
5 ECTS      WU	5 ECTS      GU	5 ECTS      GU	15 ECTS      GU/WU	



# Master of Science in Computer Science

## ESSENTIAL INFORMATION

**Degree**

**Specialisations**

**Credits**

**Mode**

**Duration**

**Language of Instruction**

: Master of Science in Computer Science

: Data Science; Technology Management

: 90 ECTS credit points

: Block Format (4 Days once a month)

: Approximately 18 months

: English

# About Programme

“

Our Master of Science in Computer Science (MSc CS) is designed for graduate students and professionals seeking to acquire academic and applied knowledge of CS and IT technology management and emerging technologies in large data processing and analysis.

The MSc programme enables you to study courses in depth from six knowledge areas, namely: Management; Network Security; Data Science; Emerging Technologies; Development; and Research.

Courses in these areas will equip you with a concrete foundation in the innovation, application and management of computer science applications across a range of disciplines. You will also acquire entrepreneurial skills matching the national priorities for a profitable and sustainable growth.

Subjects taught include machine learning, big data analytics, and network forensics as well as network security.

The MSc programme offers you the opportunity to specialise in either 'Data Science' or 'Technology Management'.

The Data Science (MSc CSDS) specialisation requires you to take at least six courses from the areas of Network Security and Data Science.

The Technology Management (MSc CSTM) specialisation requires you to take at least six courses from the areas of Management and Emerging Technologies.

The MSc in Computer Science is a four semester programme, taught on a full-time basis capped off with a Master Thesis. You can also opt to pursue a part-time mode of study. The total workload of the MSc programme is 120 credit points in the European Credit Transfer System (ECTS).

For part-time candidates, courses will be scheduled in several compact blocks of lectures (one week per month) with plenty of self-study time in between for assignments and projects.

Our collaborative agreement with Hasselt University in Belgium enables the MSc CS candidates to gain an international perspective, if you choose to spend one additional semester abroad. Hasselt University recognises all our MSc CS courses and thus allows our candidates to study one more semester only in their premises to graduate with a second Master Degree in Transportation Sciences. Our candidates are also eligible to apply for ERASMUS scholarships for a semester abroad. For more details about how to apply, you may send your enquiry to [graduate.graduate.study@gutech.edu.om](mailto:graduate.graduate.study@gutech.edu.om)

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## ADMISSION REQUIREMENTS

- ◆ Bachelor degree in information science, computer science, computer engineering It is certainly possible to apply to our programme with a Bachelor's degree in a discipline other than computer science. You must, however, possess a demonstrably strong background in computer science and a basic background in mathematics, as evidenced by a work experience in a computer science field.
- ◆ Applicants without a Bachelor degree are required to
  - Hold a Diploma (or equivalent) of not less than 2 years of study
  - Be at least 25 years of age
  - Have a minimum of 6-years of work experience
- ◆ Minimum GPA: 2.5 on a scale of 4. Applicants with a GPA between 2.0 and 2.5 is admitted in exceptional cases
- ◆ Adequate proof of English proficiency (e.g. TOEFL 76 internet-based test, IELTS 6.0 or equivalent).

## INTERVIEW

Offers of admission to the MSc CS are issued without an interview. However, this will be required from applicants who have a Bachelor degree in a discipline not directly related to the field of study.

## COST OF PROGRAMME

- ◆ A non-refundable fee OMR 100 is required prior to application being processed.
- ◆ The total cost of the programme is OMR 13,800.

## APPLICATION REQUIREMENTS

If you wish to apply for the Master of Science in Computer Science, the following items are required:

- ◆ Bachelor degree transcript
- ◆ Evidence of English language competence
- ◆ CV
- ◆ Two references
- ◆ Copy of ID card, front and back, or your passport
- ◆ Bachelor approval from Ministry of Higher Education if your degree was not issued in Oman
- ◆ Photo
- ◆ RO 100 application fee

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.graduate.study@gutech.edu.om](mailto:graduate.graduate.study@gutech.edu.om)

## SCHOLARSHIP OPPORTUNITIES

Scholarship opportunities amounting up to 50% reduction in fees are available to all applicants, Omani and international.





# PROGRAMME OUTLINE

## MSc Computer Science (CS)

Code	Name	Credit Points
CS 5 101	Advanced Analysis and Design of Information Systems	6
CS 5 102	Ethics and Policies	6
CS 5 103	Machine Learning	6
CS 1 104	Research and Thesis Preparation 1	6
	Elective 1	6
CS 5 105	Advanced Database Systems	6
CS 5 106	Advanced Topics in Networks	6
CS 5 107	Research and Thesis Preparation 2	6
	Elective 2	6
	Elective 3	6
CS 5 109	Research and Thesis Preparation 3	6
CS 5 108	Technology Strategic Management	6
	Elective 4	6
	Elective 5	6
	Elective 6	6
CS 5 110	Colloquium	30
CS 5 111	Thesis	

## MSc CS Data Science

Code	Name	Credit Points
CS 5 101	Advanced Analysis and Design of Information Systems	6
CS 5 102	Ethics and Policies	6
CS 5 103	Machine Learning	6
CS 5 104	Research and Thesis Preparation 1	6
	Elective 1	6
CS 5 105	Advanced Database Systems	6
CS 5 106	Advanced Topics in Networks	6
CS 5 107	Research and Thesis Preparation 2	6
	Elective 2 - Recommend CS 5 201 Big Data Analytics	6
	Elective 3	6
CS 5 109	Research and Thesis Preparation 3	6
CS 5 108	Technology Strategic Management	6
	Elective 4 - Recommend CS 5 202 Data Modelling and Presentation	6
	Elective 5 - Recommend CS 5 205 Data Visualisation for Data Scientists	6
	Elective 6 - Recommend CS 5 206 Statistics for Data Science and Business Analysis	6
CS 5 110	Colloquium	30
CS 5 111	Thesis	



## MSc CS Technology Management

Code	Name	Credit Points
CS 5101	Advanced Analysis and Design of Information Systems	6
CS 5 102	Ethics and Policies	6
CS 5 103	Machine Learning	6
CS 5 104	Research and Thesis Preparation 1	6
	Elective 1 - Recommend CS 5 301 Project and Risk Management	6
CS 5 105	Advanced Database Systems	6
CS 5 106	Advanced Topics in Networks	6
CS 5 107	Research and Thesis Preparation 2	6
	Elective 2 - Recommend CS 5 302 Introduction to e-Government	6
	Elective 3	6
CS 5 109	Research and Thesis Preparation 3	6
CS 5 108	Technology Strategic Management	6
	Elective 4 - Recommend CS 5 304 Cloud Computing	6
	Elective 5 - Recommend CS 5 303 Cyber Physical Systems	6
	Elective 6	6
CS 5 110	Colloquium	30
CS 5 111	Thesis	

## Electives

Code	Name	Credit Points
CS 5 201	Big Data Analytics	6
CS 5 202	Data Modelling and Presentation	6
CS 5 203	Network Forensics	6
CS 5 204	Network Security	6
CS 5 205	Data Visualisation for Data Scientists	6
CS 5 206	Statistics for Data Science and Business Analysis	6
CS 5 207	Advanced Software Engineering	6
CS 5 208	Advanced Algorithm Design	6
CS 5 209	Web System Integration	6
CS 5 301	Project and Risk Management	6
CS 5 302	Introduction to e-Government	6
CS 5 303	Cyber Physical Systems	6
CS 5 304	Cloud Computing	6
CS 5 312	Internship	6

# Master of Engineering in Industrial Production & Manufacturing

## ESSENTIAL INFORMATION

<b>Degree</b>	: Master of Engineering in Industrial Production & Manufacturing
<b>Credits</b>	: 120 ECTS credit points
<b>Mode</b>	: Block Format (4 Days once a month)
<b>Duration</b>	: 2 years
<b>Language of Instruction</b>	: English



# About Programme

“

GUtech and Brescia University (UniBS) in Italy collaborate to prepare you for a career in various engineering, manufacturing and quality disciplines related to material extraction and processing, and automation manufacturing, in a variety of manufacturing industries.

The Master of Engineering in Industrial Production & Manufacturing (MEng IPM) focuses on two strategic sectors, namely material extraction and high automation manufacturing. Both sectors are part of the very fabric of most countries aspiring to diversify their economies. In Oman, material extraction and manufacturing are fundamental to helping grow the economy and generate alternative sources of income.

The MEng IPM curriculum includes several applied topics in materials processing and testing, process planning, process simulation, design review, project management, and cost and feasibility analysis that relate to use of materials, and process engineering. You will also acquire practical knowledge in the principles of quality management and economics, with a focus on entrepreneurship. The programme also includes a practical internship component and a MEng thesis. This will enable you to gain a solid and in-depth knowledge in the field of extraction, production, testing and control of ferrous, non-ferrous and polymeric materials, the use of new advanced materials for component production, and plant logistics with a special focus on business development and entrepreneurship.

You will also learn how to run a machine, design a production cycle, or optimise a manufacturing processes by using ad hoc simulation software in GUtech Labs.

The gained knowledge in this “virtual environment” will give you the possibility to go deeply inside the problems of running a machine or optimising a manufacturing process without running expensive and time consuming experimental tests in the workshop.

You may choose to enrol in the programme on a full-time or part-time basis. The Master programme has a total workload of 120 ECTS credit points including a master’s thesis.

The MSc programme is taught in English by GUtech faculty members and visiting professors from the University of Brescia or other renowned universities.

You may choose to conduct the end of programme thesis and/or undertake internship placements in Brescia, Italy. The collaboration with Brescia University also enables you to use housing facilities during your stay in Brescia.

Upon completion of the MEng IPM, you will have acquired a working knowledge to take over technical and/or management positions in materials, parts or goods production industries of different sizes, and design and manufacturing consultancy companies.

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## ADMISSION REQUIREMENTS

- ◆ A recognised Bachelor degree in mechanical, production, industrial, CAD/CAM, process, material science or equivalent fields of study. In some instances, relevant work experience can compensate for derivation from narrow related field of study.
- ◆ Applicants without a Bachelor degree are required to
  - Hold a Diploma (or equivalent) of not less than 2 years of study
  - Be at least 25 years of age
  - Have a minimum of 6-years of work experience
- ◆ Minimum GPA: 2.5 on a scale of 4. Applicants with a GPA between 2.0 and 2.5 is admitted in exceptional cases
- ◆ Proof of English proficiency (e.g. TOEFL 76 internet-based test, IELTS 6.0 or equivalent).

## INTERVIEW

Offers of admission to the MEng IPM are issued without an interview. However, holders of an environmental engineering degree or any other narrowly related field will be required to attend an interview. The outcome of the interview should help you ensure the suitability of the programme for your academic and career aspirations.

## COST OF PROGRAMME

- ◆ A non-refundable fee OMR 100 is required prior to application being processed.
- ◆ The total credit points required to complete and obtain MEng IPM is 120 ECTS credit points. Fees are calculated on the basis of OMR 115 per ECTS CP. The total cost of the programme is OMR 13,800.

## APPLICATION REQUIREMENTS

If you wish to apply for the Master of Engineering in Industrial Production and Manufacturing, the following items are required:

- ◆ Bachelor degree transcript
- ◆ Evidence of English language competence
- ◆ CV
- ◆ Two references
- ◆ Copy of ID card, front and back, or your passport
- ◆ Bachelor approval from Ministry of Higher Education if your degree was not issued in Oman
- ◆ Photo
- ◆ RO 100 application fee

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## SCHOLARSHIP OPPORTUNITIES

Scholarship opportunities amounting up to 50% reduction in fees are available to all applicants, Omani and international.



# PROGRAMME OUTLINE

1	Production of Materials	Advanced Production Processes and Technologies	Modern Aspects of Testing and Control Production Processes
	Principles of Economy and Entrepreneurship	Quality Management and Design Review	
2	Material Mechanics	Plant Management and Logistics	Computer-Integrated Manufacturing and Manufacturing Systems
	Material Selection and Engineering	Non-traditional and Additive Manufacturing Processes	
3	Recycling & Life Cycle Assessment	Virtual Manufacturing and Process Simulation	Summer break Internship
	Advanced Surface Technology and Engineering	Environmental Aspects and Sustainability of Industrial Processes	
	Project Management or Business Laws and Regulations in Oman	Micro- and Nano-Scale Manufacturing or Specific Processing Techniques applied to local Ores	
4	Master Thesis		Colloquium



# Doctorate in Philosophy in Applied Geosciences

## ESSENTIAL INFORMATION

<b>Degree</b>	: Doctor of Philosophy (PhD) in Applied Geosciences
<b>Credits</b>	: 20 credit points of compulsory coursework 160 credit points of independent original work of advanced research on a topic in Geosciences an
<b>Mode</b>	: Full-time/Part-time
<b>Duration</b>	: 3 years minimum
<b>Language of Instruction</b>	: English



# About Programme

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The PhD Applied Geosciences degree programme, a research-based doctoral programme, is offered by the Faculty of Sciences at the German University of Technology in Oman (GUtech).

The PhD Geosciences degree programme offers a curriculum that will allow candidates to perform independently an original work of advanced research on a topic that is relevant to many of today's advanced earth, environment, and natural resources and physical sciences challenges.

The PhD study plan consists of a total of 180 credit points. Candidates are expected to complete all degree requirements in a minimum of six (6) semesters.

The programme includes a total of 20 credit points of compulsory courses.

Candidates may choose to complete the programme either on a full-time or part-time basis.

Applicants must have successfully completed a Master degree or equivalent in Geosciences, geosciences, geology, physics, petroleum engineering, environmental sciences, etc... with a minimum cumulative GPA of 2.5 (on scale of 4).

All degree courses and written thesis are in English, requiring candidates to provide evidence of a minimum score of 6.0 in IELTS.

The thesis must relate to the scientific fields covered by applied geosciences. The research results have to be original and must demonstrate the candidate's skills to undertake original research.

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## APPLICATION REQUIREMENTS

- ◆ A bachelor's degree in a related field (e.g., geosciences, geology, physics, petroleum engineering, environmental sciences, ...) from an accredited college or university, attested by the Ministry of Higher Education, Research and Innovation in the Sultanate of Oman.
- ◆ A master's degree in a related field (e.g., geosciences, geology, physics, petroleum engineering, environmental sciences, ...) from an accredited college or university, attested by the Ministry of Higher Education, Research and Innovation in the Sultanate of Oman.
- ◆ A Master's transcript with a minimum cumulative GPA of 2.5 (on a 4-point scale).
- ◆ At least two (2) years of work experience in a related field for applicants with cGPA of 2.5 – 2.99.
- ◆ No work experience required for applicants with cGPA 3.0 and more.
- ◆ IELTS 6.0 or equivalent



## PRE-APPLICATION REQUIREMENTS

We encourage candidates from the industry to propose industry-relevant applied research topics.

Professors from the faculty will announce regularly externally funded research assistant positions suitable for graduates without industry experience.

In any case, the research topic requires the formal approval of the Dean of the Faculty.

Ideally, you should have a clear idea of what subject area you intend to pursue for your research. You should then contact the Dean of the Faculty of Science by email to Prof. Dr. Wilfried Bauer [wilfried.bauer@gutech.edu.om](mailto:wilfried.bauer@gutech.edu.om) to identify and approach the supervisor who would be prepared to serve as the supervisor for your research.

*In your email, you should include:*

- ◆ C.V
- ◆ Copies of your attested master's degree and transcript
- ◆ A statement of your specific research interests and include whether you intend to pursue your research on a full-time or part-time basis and specify how to do you intend to cover the research expenses and tuition fees.
- ◆ Two recommendation letters from persons who are familiar with your academic and professional background.



## UNIVERSITY APPLICATION PROCEDURE

- ◆ Applications for admission are handled centrally the department of registration and student affairs.
- ◆ Applicants should secure a PhD supervisor prior to applying for admission.
- ◆ PhD applicants without an agreed faculty supervisor will not be considered for admission.
- ◆ the procedure to apply for admission starts with applying online.
- ◆ Copy of attested Bachelor's degree.
- ◆ Copy of attested Master's degree.
- ◆ Copy of Master's transcript.
- ◆ Copy of IELTS 6.0 certificate or equivalent\*.
- ◆ Research approval form signed by the Dean of the Faculty of Science.
- ◆ We decide about the eligibility of applicants to the PhD programme based on academic certificates and work background as well as personal interviews.
- ◆ \*IELTS 6.0 equivalences include: TOEFL IBT 76, PTE 56, CAE 169, IB/IGCSE/A-Level/GCE/CBSE/ISBE Certificate

## TUITION FEES AND FUNDING

- ◆ Academic year - 2023-2024
- ◆ Total fee (OMR) - 15,000
- ◆ Application fee (OMR) - 100

# Master of Science in Hydrogen Economy and Technology

## ESSENTIAL INFORMATION

<b>Degree</b>	: Master of Science in Hydrogen Economy and Technology
<b>Credits</b>	: 80 ECTS credit points : 200 OQF credit points
<b>Mode</b>	: Block Format (4 Days once a month)
<b>Duration</b>	: Approximately 18 months
<b>Language of Instruction</b>	: English

Hydrogen H<sub>2</sub>

zero emission



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## About Programme

The Sultanate of Oman has a clear aim to become one of the largest green hydrogen producers and exporters globally, targeting the production of one million tons by 2030 and achieving net-zero emissions by 2050.

Sustainable hydrogen production is one of the six main decarbonization technologies identified by the Sultanate of Oman, as

stated in the National Strategy for an Orderly Transition to Net Zero published in 2022. The Master of Science in Hydrogen Economy and Technology at GUtech is designed to equip students with the knowledge and skills required to work in the growing field of hydrogen economy and technology in Oman.

## Our objectives

- ◆ Contributing to industry capacity building, particularly in research and development, and enhancing Oman's academic community by providing the opportunity for master's level qualifications locally.
- ◆ Preparing students for diverse careers in the hydrogen sector.
- ◆ Equipping students with an in-depth comprehension of the principles and technologies associated with hydrogen production, storage, transport, and utilization.
- ◆ Familiarizing students with the economic, environmental, and social implications of hydrogen energy.
- ◆ Cultivating critical thinking skills in students to assess the viability and sustainability of hydrogen-based energy systems.
- ◆ Empowering students to conduct independent research in the field of hydrogen energy and contribute to the development of new knowledge and technologies.

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## APPLICATION REQUIREMENTS

If you wish to apply for the GUtech-WU MBA, the following items are required:

- ◆ Bachelor degree transcript.
- ◆ Evidence of English language competence.
- ◆ CV, showing at least 3 years work experience.
- ◆ Two references from employers, one being your current line manager. A form will be provided for this.
- ◆ Copy of ID card, front and back, or your passport.
- ◆ Bachelor approval from Ministry of Higher Education if your degree was not issued in Oman.
- ◆ Bachelor approval confirmation from the Austrian Honorary Counsel if your degree was not issued in Europe.
- ◆ Photo.
- ◆ RO 100 application fee.

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## SCHOLARSHIP OPPORTUNITIES

Scholarship opportunities amounting up to 50% reduction in fees are available to all applicants, Omani and international.

## ADMISSION REQUIREMENTS

- ◆ Bachelor degree in Business or Engineering or closely related field.
- ◆ Applicants without a Bachelor degree are required to
  - Hold a Diploma (or equivalent) of not less than 2 years of study
  - Be at least 25 years of age
  - Have a minimum of 6-years of work experience
- ◆ Equivalences include: TOEFL IBT 76, PTE 56, CAE 169, IB/IGCSE/A-Level/GCE/CBSE/ISBE Certificate
- ◆ Minimum GPA: 2.5 on a scale of 4. Applicants with a GPA between 2.0 and 2.5 is admitted in exceptional cases.
- ◆ In addition to the above, an interview may be required to verify suitability for the program.

Do you have questions about the admission and the application requirements? Please send your enquiry to [graduate.study@gutech.edu.om](mailto:graduate.study@gutech.edu.om)

## COST OF PROGRAMME

- ◆ A non-refundable fee OMR 100 is required prior to application being processed.
- ◆ The total credit points required to complete and obtain the GUtech-WU MBA is 90 ECTS credit points (ECTS CP). Fees are calculated on the basis of OMR 167 per ECTS CP. The total cost of the programme is OMR 15,000.



# PROGRAMME OUTLINE

First Semester (30 CPs)					
Renewable Energies	Hydrogen Production	Hydrogen Storage, Transportation & Distribution	Hydrogen Utilization	Elective I	Elective II
5 CP	5 CP	5 CP	5 CP	5 CP	5 CP
Second Semester (30 CPs)					
MHTE 005 System Engineering	Hydrogen Safety, Standardization and Regulations	Hydrogen Economy & Markets	Start-up Project	Elective III	Elective IV
5 CP	5 CP	5 CP	5 CP	5 CP	5 CP
Third Semester (20 CPs)					
Master's Thesis					











**Scan Me**

## CONTACT US

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