

Research publications



Consolidated Report | 2015 Innovative research, graduate learning and teaching, and creative practice

PREFACE

The German Jordanian University (GJU) has proven to be one of the leading universities in Jordan and its uniqueness comes from the design of its programs that are responsive to the market demand and the needs of industry, business, and government.

Scientific research at GJU is considered to be one of the vital roles of faculty members. High caliber research has profound impacts on researchers, students, the institution and the country. It stimulates thought, expands horizons, enhances reputations, and solves important and pressing problems and issues. The deanship is established to support research at GJU by providing seed funding, supporting access to national and international funding, facilitating publication of research results, and encouraging faculty to participate in international scientific conferences. The objective is to establish profound research lines that will ultimately be self-sustaining.

We strive to provide fascinating environment for innovative research, graduate learning and teaching, and creative practice so that our students receive a well-rounded education and our faculty get optimal support, while ensuring that codes of academic discipline are fulfilled to the maximum possible extent with transparency and equal opportunity for all.

This document presents a consolidated report of research publication in all schools of GJU until year 2015. It is evidence that research production is substantial and provides basis for success and growth.

Sincerely,

Prof. Dr. Salem Al-Agtash

Dean of Graduate Studies and Scientific Research

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SCHOOL OF APPLIED HUMANITIES AND LANGUAGES

Dean: Dr. Jochen Pleines

Vice Dean: Dr.Reem Al Rabadi

Our vision is to become one of the leading schools in the Kingdom by setting standards of excellence in innovative curriculum design, teaching, professional development, and cross-cultural understanding. We acknowledge that language is fundamental to all learning, inquiry and communication. Our school aims to develop global citizenship through teaching and learning languages. This is accomplished by encouraging individuality and fostering respect for difference and value learning from others within an international environment. This multicultural approach is driven by the nurturing of language acquisition in a global community and ensuring students have access to a language of the host culture (Arabic English German) while at the same time safeguarding our students' native languages.

DEPARTMENT OF LANGUAGES

Head of Department: Dr.Reem Al-Rabadi

Faculty	Rank	Specialization
Prof. Dr. Salah Al-Salman	Professor	Philology of Semitic languages
Dr. Jochen Pleines	Associate Professor	English and German Linguistics
Dr. Omar Abu Nawwas	Associate Professor	Arabic Syntax
Dr. Mohammad Saraireh	Associate Professor	Linguistics
Dr. Reem Rabadi	Assistant Professor	Applied Linguistics
Dr. Saleh Khalileh	Assistant Professor	Sociolinguistics
Dr. Karin Leich	Assistant Professor	Modern German Literature
Dr. Nicola Huson	Assistant Professor	German as a Foreign Language
Dr. Ortrun Hanna	Assistant Professor	German Linguistics
Dr. Michael de Jong	Assistant Professor	Linguistics/German as a Foreign Language
Dr. Thelal Oweis	Lecturer	English Language Curriculum and Instruction
Dr. Viktoria Poetzl	Lecturer	German Language
Dr. Monika Hryniewicka	Lecturer	Modern German Literature
Ms. Kinana Nasra	Lecturer	Translation
Ms. Judith Labs	Lecturer	German as Foreign Language
Ms. Raghad Al Hadidi	Lecturer	English Language
Mr. Oliver Ritter	Lecturer	Arabic Studies
Ms. Dina Omar	Lecturer	German as Foreign Language
Ms. Mariam Abu Hussein	Lecturer	German as Foreign Language

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- 14. Abu Nawas, O. (2014). Manifestations of Jordanian Place in Travel Literature. *The Fourth International Conference (Literature Platform for Cultural Interaction),* Mutah University, Jordan.
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SCHOOL OF APPLIED MEDICAL SCIENCES

Dean: Dr. Malyuba Abu Daabes

Vice Dean: Dr. Eyad Hamad

The School of Applied Medical Sciences (SAMS) was established in 2005. The SAMS offers undergraduate programs in two applied engineering disciplines giving the students the knowledge and skills they need for success in an applied medical engineering oriented career.

Graduates of the SAMS are expected to fill the gap in the Jordanian and the regional markets in critically needed disciplines concerning technology transfer and innovation. In addition, to deliver to the national/international industrial partners with qualified applied-based engineers.

The approach of the school is to foster applied learning in all courses offered via practical projects, teamwork, technical writing. The school capitalizes on the great opportunity of studying and training of its students in Germany during the fourth year to facilitate knowledge transfer through partnership with many reputable universities and specialized industrial partners in Germany.

The SAMS provides state-of-the-Art laboratories within the scope of teaching approach such as Biomaterials science, biomedical sensors and transducers, Medical Instrumentation, Instrumental analysis, separation, Pharmaceutical manufacturing and Industrial zone.

DEPARTMENT OF BIOMEDICAL ENGINEERING

Chair: Dr. Hussam Kloub

Faculty	Rank	Specialization
Dr. Adnan Al-Lahham	ham Associate Professor Biology / Microbiology	
Dr. Akeel Al-Kazwini	Associate Professor	Biophysics Radiology
Dr. Nasim Alnuman	Assistant Professor	Mechanical Engineering
Dr. Eyad Hamad	Assistant Professor	Biomedical Engineering
Dr. Hamdi Hamdi	Assistant Professor	Biology
Dr. Hussam Kloub	Assistant Professor	Electronics and Microsystems Engineering
Dr.Walid Al-Zyoud	Assistant Professor	Molecular Pathology

The Academic Program of the Department of biomedical engineering of the best software engineering academic distinction at the level of the Hashemite Kingdom of Jordan. Biomedical Engineering was created in response to the constant changes in the world and the emergence of new technological areas, to keep pace with rapid advances in technology and bio-medical engineering graduates are directed towards the needs of the market and industry. Our mission at the Department of biomedical engineering is to provide graduates with the best practical and scientific experience in the field of biomedical engineering. Prepare graduates with the skills.

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 of magnetic energy harvester at low resonance frequency, International Journal of Thermal &
 Environmental Engineering 10 (1):75-80
- 3. AlAl-Gharabli, S. Rawashdeh, N. Hamad, E. AlQasem, E. & Hamdi, H. (2015). *Neural Network Based Prediction of 3D Protein Structure as a Function of Enzyme Family Type and Amino Acid Sequences*, submitted.
- 4. Kazwini, A. (2015). Compartmental analysis of metals in waterpipe smoking technique BMC Public Health 2015, (15): 153.
- 5. Kloub, H. Hamad, E. (2015). Electromechanical modeling and designing of capacitive MEMS DC/AC interactive power inverter for renewable energy applications. Microsystem Technologies, doi: 10.1007/s00542-015-2767-1
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DEPARTMENT OF CHEMICAL AND PHARMACEUTICAL ENGINEERING

Chair: Dr. Esra'a Albarahmieh

Faculty	Rank	Specialization
Prof. Manar Fayyad	Professor	Chemistry
Prof. Munib Saket	Professor	Pharmaceutical Sciences
Dr. Malyuba Abu Daabes	Associate Professor	Chemical Engineering
Dr. Samer Al-Gharabli	Associate Professor	Chemisrty
Dr. Mohammad Alnaief	Assistant Professor	Chemical Engineering
Dr. Mohammad Khanfar	Assistant Professor	Chemistry
Dr. Ziad Abuelrub	Assistant Professor	Chemical Engineering
Dr. Balsam Mohammad	Assistant Professor	Chemical Engineering
Dr. Esra'a Albarahmieh	Assistant Professor	Pharmaceutical Technologies
Dr. Nafisah Al-Rifai	Assistant Professor	Chemisrty

The pharmaceutical-chemical engineering program is a unique integration between chemistry, biochemistry, pharmacology and engineering branches. Students will be exposed to basic, cutting edge, and training courses in these different disciplines. Prospective engineers will be able to transfer raw materials into useful pharmaceutical and fine chemical products with commercial interest through systematic use of engineering concepts and methods.

The main objective of the pharmaceutical-chemical engineering program is to generate a new type of professionals combining chemical process engineering basics along with the skills required to work in the pharmaceutical industry. This includes engineering aspects of drug manufacturing and pharmaceutical development with emphasis on unit pharmaceutical operations such as blending, compaction, crystallization, sampling and granulation.

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- 2. Al-Gharabli, S. Rawashdeh, N. Hamad, E. AlQasem, E. & Hamdi, H. (2015). Neural Network Based Prediction of 3D Protein Structure as a Function of Enzyme Family Type and Amino Acid Sequences.
- 3. Al-Gharabli, S., Azzam, M., & Addous, M. (2015). Microwave-Assisted Extraction of Shale Oil from Jordanian Oil Shale, *Oil Shale Journal 3*.
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- 14. Fayyad, M. (2014). Testing the efficiency of Acacia Bark (Galool asal) as disinfictant for polluted waters, Journal of Water Resources and Protection, Published Online, (http://www.scirp.org/journal/jwarp), http://dx.doi.org/10.4236/jwarp.2014.63021.
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- Hentzschel, CM., Alnaief, M., Smirnova, I., Sakmann, A., & Leopold, CS. (2012). Enhancement of griseofulvin release from liquisolid compacts, European Journal of Pharmaceutics and Biopharmaceutics,
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THESIS

- 1. Nida' Abdel-fattah Al-Worikat, supervisor Dr. Nathalie Bussieres, "Visual Stimulation for Children with cerebral Visual Impairment", June 2015, Master of science in field of vision Rehabilitation
- Sami Nemer Obeid, Supervisor Dr Nathalie Bussieres," Stimulation: Effectiveness of iPad applications in vision stimulation for children with visual impairment and other disabilities", Jan 2015, Applied Medial Sciences- Vision Rehabilitation.
- 3. Moayad Adnan Nouaf Al-Deek, Supervisor Dr. Nathalie Bussieres,"Training and provision of visual aids for distance task in children with low vision and nystagmus .Jan2015, Applied Medial Sciences- Vision Rehabilitation.
- 4. Sami Mohammed Saleem Shblaq, Supervisor Dr. Nathalie Bussieres, "Visual Rehabilitation Patients with Keraoconus by using Contract Lenses", June 2014, Applied Medical Sciences Vision Rehabilitation.
- 5. Noor Ibraheem Abdelhadi, Supervisor Dr. Nathalie Bussieres,"Effect of visual Training at Near in People with Nystagmus ", June 2014, Applied Medial Sciences- Vision Rehabilitation.
- 6. Maisaa Ata Said Masoud, Supervisor Dr.Nathalie Bussieres, "The Effect of vision Rehabilitation and Environmental Accommodations in Improving the Quality of life of Adult women with Low vision "Oct 2014, Applied Medial Sciences- Vision Rehabilitation.
- 7. Amer Adel Abuhassira, Supervisor Dr. Nathalie Bussieres, "Effect of correction the refactive error and visual training on the visual functioning of children with multiple disabilities, Oct 2014, Applied Medial Sciences- Vision Rehabilitation
- Abdel Munen Mohammd Aldweiri, supervisor Dr.Nathalie bussieres," Developing a training program to Improve visual efficiency in children using eccentric fixation", May 2012, School of applied Medical Sciences.
- Mustafa Ahmad Mustafa Al-Qaisi, Supervisor Prof: Micheal Brambring, Advisor: Dr. Nathalie Bussieres,"Observing and developing play skills in Children that are blind", Applied Medial Sciences-Vision Rehabilitation.
- 10. Randa Mohammad Abdelrahim, supervisor Dr. Nathalie Bussieres "Socail Skills training for preschool children with visal impairment, Sep2012, Applied Medial Sciences- Vision Rehabilitation.
- 11. Yousr Asri Qutishat, Supervisor Dr. Nathalie Bussieres, "Studying the Development of Tactual Skills in Children with Blindness in Jordan, Sep2012, Applied Medial Sciences- Vision Rehabilitation.
- Maysalon Muaffaq Thebyan, Supervisor Dr. Nathalie Bussieres,"Assessment of the Benefits of Optometric Rehabilitation Services in Improving Visual Function of Student with Low Vision", May2012, Applied Medial Sciences- Vision Rehabilitation.

SCHOOL OF APPLIED TECHNICAL SCIENCES

Dean: Dr. Ziyad Masoud

Vice Dean: Dr. Hazem Kaylani

The School of Applied Technical Sciences (SATS) was established in 2005. The SATS offers undergraduate programs in three engineering disciplines giving the students the knowledge and skills they need for success in a technically oriented career.

Graduates of the SATS are expected to fill the gap in the Jordanian and the regional markets in critically needed disciplines concerning technology transfer, innovation, and management. The approach of the school is to foster applied learning in all courses offered via practical projects, teamwork, technical writing, and presentations. The school capitalizes on the great opportunity of studying and training of its students in Germany during the fourth year to facilitate transfer and management of technological resources via partnership with many reputable universities in Germany. The SATS provides labs in the following areas: materials science, manufacturing processes, industrial automation, work measurements, ergonomics, systems simulation, instrumentation and measurements, automatic control systems, hydraulic and pneumatic systems, and automotive maintenance. In addition, the SATS has a modern engineering workshop facility.

DEPARTMENT OF MECHANICAL AND MAINTENANCE ENGINEERING

Chair: Dr. Ahmad Almuhtady

Faculty	Rank	Specialization
Dr. Ismael Alhinti	Associate Professor	Thermal sci. & fluids/Renewable energy
Dr. Mohammad Nazzal	Associate Professor	Manufacturing processes
Dr. Aiman Alshare	Assistant Professor	Thermal sci. & fluids
Dr. Ahmad Almuhtady	Assistant Professor	Thermal sci. & fluids/Maintenance manag.
Dr. Ma'en Sari	Assistant Professor	Applied mechanics
Mr. Ahmad Hammad	Lecturer	Thermal sci. & fluids/Applied mechanics

The Academic Program of the Department of Mechanical and maintenance Engineering is one of the most outstanding engineering programs in the Hashemite Kingdom of Jordan. In addition to being the only program that grants a bachelor's degree in mechanical and maintenance engineering, the academic content for this program is a harmonic integration of mechanical engineering and maintenance engineering and management with equal focus on the theoretical and practical aspects of the two majors. The mechanical engineering aspect covers the traditional Thermofluid Science and Applied Mechanics. Via a large number of specialized courses that are taught using the latest educational and practical means including software and hardware laboratories. The maintenance engineering and management side covers maintenance operations management and quality and efficiency control of products and production, in addition to warehouse management operations. Graduates of mechanical and maintenance engineering program will have the appropriate theoretical and practical background that qualifies them to work in a wide range of engineering fields.

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 Renewable Energy Research, Amman, Jordan.
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- 12. Alshare, A., Tashtoush, B., & El-Khalil, H. H. (2013). Computational modeling of non-newtonian blood flow through stenosed arteries in the presence of magnetic field. Journal of biomechanical engineering, 135(11): 114503.
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- 29. Nazzal, M. A. (2010). Effects of Hydrostatic Pressure on Superplastic Deformation Stability. In AEROAMT Conference, Seattle, USA.

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DEPARTMENT OF INDUSTRIAL ENGINEERING

Chair: Dr. Safwan Altarazi

Faculty	Rank	Specialization
Dr. Safwan Altarazi	Associate Professor	Industrial Engineering
Dr. Hazem Kaylani	Assistant Professor	Industrial Engineering
Dr. Rula Allaf	Assistant Professor	Industrial Engineering
Dr. Iyas Khader	Assistant Professor	Mechanical Engineering
Dr. Mahmoud El-Banna	Assistant Professor	Industrial Engineering
Dr. Anas Atieh	Assistant Professor	Materials and Manufacturing Engineering
Dr. Nidal Shawawreh	Assistant Professor	Materials Engineering
Dr. Dina Elayyan	Industrial Professor	Industrial Engineering
Eng. Maysa Ammouri	Instructor	Industrial Engineering
Eng. Hiba Melhem	Lecturer	Industrial Engineering

The program provides an interdisciplinary educational foundation for its graduates to understand problems and to find and implement solutions with a system engineering perspective; students are provided with the essential tools to consider the technological, business and human aspects of problems in complex systems. The program consists of the following areas of study: basic sciences; engineering materials and manufacturing processes; statistics and quality management; optimization, operations management and managerial sciences, ergonomics, economics and finance, and informatics. The department offers a B.Sc. in Industrial Engineering.

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- Altarazi, S., & Yasin, O. (2015). Integration of Process Planning and Scheduling with Sequence Dependent Setup Time: A Case Study from Electrical Wires and Power Cable Industry. In Modelling, Computation and Optimization in Information Systems and Management Sciences (pp. 283-294). Springer International Publishing.
- 3. Atieh, A. M., Kaylani, H., Almuhtady, A., & Al-Tamimi, O. (2015). A value stream mapping and simulation hybrid approach: application to glass industry. The International Journal of Advanced Manufacturing Technology, 1-14.
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DEPARTMENT OF MECHATRONICS ENGINEERING

Chair: Dr. Jumana Abu-Khalaf

Faculty	Rank	Specialization
Dr. Ziyad Masoud	Associate Professor	Mechanical Engineering
Dr. Ala'Aldeen Halhouli	Associate Professor	Mechanical Engineering
Dr. Lamya Alchalabi	Associate Professor	Electrical Engineering
Dr. Nathir Rawashdeh	Assistant Professor	Electrical Engineering
Dr. Jumana Abu-Khalaf	Assistant Professor	Mechatronics Engineering
Dr. Wael Alkouz	Assistant Professor	Mechanical Engineering
Dr. Mutaz Ryalat	Assistant Professor	Mechatronics Engineering
Eng. Natheer Almtireen	Instructor	Mechatronics Engineering

Mechatronics engineering is an integrated approach to the design of computer controlled electromechanical systems. Mechatronic applications are pervasive in our everyday lives, so much so that we often take them for granted. Familiar examples of mechatronic systems include automotive anti-lock braking systems (ABS), SLR cameras, and aerospace "fly-by-wire" systems. These mechatronic designs are much more than simply the addition of a microcontroller to an existing mechanical system – their complete and properly integrated redesign is what makes them successful. An integrated design philosophy has been incorporated into the development of this program.

The Mechatronics Engineering program is specifically designed to provide a comprehensive, unique, and integrated curriculum. The Mechatronics Program is based on modeling, design, analysis and functioning of computer-controlled electronics/electrical mechanical systems. The program consists of primarily core courses that must be taken by all Mechatronics students, elective courses distributed throughout the program and a real hands-on training program for 6 months in Germany.

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- 9. Alhazza, K., Masoud, Z., & Alotaibi, N. (2015). A Smooth Wave-Form Shaped Command with Flexible Maneuvering Time: Analysis and Experiments, Asian *Journal of Control*, doi:10.1002/asjc.1204.
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- 13. Alghanim, K. A., Alhazza, K. A., & Masoud, Z. N. (2015). Discrete-time command profile for simultaneous travel and hoist maneuvers of overhead cranes. *Journal of Sound and Vibration*, 345, 47-57.
- 14. Rawashdeh, N. A., Rawashdeh, O. A., & Sababha, B. H. (2015). Vision-based sensing of UAV attitude and altitude from downward in-flight images, Journal of Vibration and Control, 1077546315586492.
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- 40. Rawashdeh, N., Nazzal, M., Kaylani, H., & Loose, H. (2010). Mechatronics Engineering Curriculum Enhancement at the German Jordanian University, In *11th International Workshop on Research and Education in Mechatronics*, Technical University of Ostrava, Czech Republic. pp. 205-210.
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SCHOOL OF ARCHITECTURE AND BUILT ENVIRONMENT

Dean: Prof. Mohammed Yaghan

Vice Dean: Dr. Janset Shawash

The School of Architecture and Built Environment was founded in 2006. It is formed on an applied model of education that integrates academia with practice. Through its interactive learning environment, the school prepares the students for critical involvement with real practice and enhances their awareness and sensitivity to social responsibilities, sustainability and environmental intervention, and the benefits of research and innovation. Emphases are placed on teamwork, networking, and the integration of education and the market place.

DEPARTMENT OF ARCHITECTURE AND INTERIOR ARCHITECTURE

Chair: Dr. Maram Altawil

Faculty	Rank	Specialization	
Prof. Natheir Abu Obaid	Professor	Architecture	
Prof. Majd Al-Homoud	Professor	Cultural /Socio-Behavioral Studies in Housing and Built Environment	
Dr. Rami Daher	Associate Professor	Historic Preservation and Urban Regeneration	
Dr. Maram Tawil	Assistant Professor	Spatial Planning, Urban & Regional Sociology	
Dr. Janset Shawash	Assistant Professor	Development Planning	
Dr. Omaimah Al-Arja	Assistant Professor	Building Sciences-Architectural Acoustics	
Dr. Anna Konstantin	Assistant Professor	Science of Architectural focusing in Antique Landscape	
Raed Al Tal	Assistant Professor	Architectural History/Contemporary Middle Eastern Architecture	
Prof. Mohammad Kadhim	Industrial Professor	Urban Planning	
Farouk Yaghmour	Industrial Professor	Planning	
Arch. Rejan Ashour	Industrial Professor	Architecture	
Arch. Bisher Zureikat	Industrial Professor	Architecture	
Arch. Mohammad Khaled	Industrial Professor	Architecture	
Arch. Leen Fakhoury	Industrial Professor	Conservation studies	
Arch. kamal Jalouqah	Industrial Professor	Urban Planning	
Arch. Raed Al-Naber	Industrial Professor	Architecture	
Arch. Amani Malhas	Industrial Professor	Architecture	
Arch. Tha'er Qub'a	Industrial Professor	Architecture	
Eng. Maryam Al-Azzeh	Instructor	Structural Engineering	
Arch. Tala Awadalah	Instructor	Energy efficient buildings & architecture	
Arch.Kawthar Alrayyan	Full time lecturer	landscape architecture	

Arch. Farah Akiely	Full time lecturer	Spatial Planning
Arch. Tala Mukheimer	Full time lecturer	Architectural Conservation

B. Sc. Program in Architecture (launched 2006/2007):

Main Stream: Architecture

Interior Architecture Stream- the first and the only Program in Jordan in Interior Architecture.

M. Sc. Program in Spatial Planning (launched 2009/2010) – the first and only Program in Jordan in Spatial Planning.

Urban Design and Urban Regeneration

DEPARTMENT OF DESIGN AND VISUAL COMMUNICATION

Chair: Arch. Caesar Jarrar

Faculty	Rank	Specialization
Prof. Mohammad Yaghan	Professor	Design by Computer
Prof. Ziyad Haddad	Professor	Meta Criticism
Dr. Feda M. Salah	Assistant Professor	Architecture-Product and Spatial Design
Loozan Sabri	Assistant Instructor	Design and Visual arts
Arch. Caesar Jarrar	Industrial Professor	Temporary Architecture and Museum Design Birmingham Institute of Art and Design
Servet Golbol	Industrial Professor	Master of Fine Arts
Mousa Abu-Khalaf	Industrial Professor	MA in 3D Computer Animation
Arch. Rawan Majzoub	Instructor	Msc. Design & Digital media
Sofiya Hidzhazi	Full time lecturer	Msc. Industrial Design
Lamis Mawafi	Full time lecturer	MFA Textiles
Nada Jaffal	Full time lecturer	Design Research Mythologies
Ola sawaei	Full time lecturer	Cinematography
Nader Hammouqah	Full time lecturer	Illustration & Animation
Hazar Marji	Lecturer	Design Master of Integrated

B.A. Program in Design and Visual Communication (launched 2008/2009):

An integrated design program incorporating graphic design, cinematography and TV production, multimedia and animation, and product design- the first and the only program in Jordan that deals with design and visual communication from an integrated perspective. It is also the first Program at the Bachelor level that concerns Cinema and TV Production.

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SCHOOL OF BASIC SCIENCES AND HUMANITIES

Dean: Prof. Nabil Ayoub

Vice Deans: Dr. Omar Abu Nawas, Dr. Omar Alomari,

Assistant Dean: Mrs. Iman Shashaa

The School of Basic Sciences and Humanities was established at the beginning of 2015. The School is concerned with offering and teaching mandatory and elective university and schools course requirements for students towards fulfilling their Bachelor Degree requirements. The School offers courses in Mathematics, Physics, English and Arabic Language, National Education, Military Sciences, along with some Humanities elective courses.

Faculty	Academic Rank	Specialization
Prof. Nabil Ayoub	Professor	Physics
Dr. Omar Abu Nawas	Associate Professor	Arabic
Dr. Dia Zeidan	Associate Professor	Mathematics
Dr. Husam Abu Safe	Associate Professor	Physics
Dr. Omar Alomari	Assistant Professor	Mathematics
Dr. Mohammad Abu Dayah	Assistant Professor	Mathematics
Dr. Mohammad AlQudah	Assistant Professor	Mathematics
Dr. Hussein Taani	Assistant Professor	Physics
Dr. Sameer Arabasi	Assistant Professor	Physics
Dr. Inshad Yousef	Assistant Professor	Physics
Dr. Haytham Thawabieh	Assistant Professor	Arabic
Dr. Abdallah Al-Raggad	Assistant Professor	National Education
Dr. Safa Shweihat	Assistant Professor	National Education
Mrs. Iman Shashaa	Instructor	English Language
Mr. Adel Hawatmeh	Instructor	National Education
Mrs. Nidal Al-Hihi	Instructor	English Language
Mrs. Vera Khamashta	Instructor	English Language
Mrs. Dina Hindi	Instructor	English Language
Mrs. Eva Haddad	Instructor	English Language
Miss Basmah Al-Taher	Instructor	English Language
Mr. Laith Hawawsheh	Full time lecturer	Mathematics
Miss Anwar Bastanji	Full time lecturer	Mathematics
Mr. Mahmoud Algharram	Full time lecturer	Physics
Mr. Majdi Amr	Full time lecturer	Physics
Mrs. Nisreen Saleh	Full time lecturer	English Language
Mrs. Lamia Azoka	Full time lecturer	English Language
Dr. Kawther Karain	Full time lecturer	English Language

Mrs. Sausan Murthy	Full time lecturer	English Language
Dr. Dima Khasawneh	Full time lecturer	English Language
Miss Rasha Hijazeen	Full time lecturer	English Language

- Mosleh, A., Alher, M., Cousar, L., Abu-Safe, H., Dou, W., Grant, P., Al-Kabi, S., Ghetmiri, S., Alharthi, B., Tran, H., Wei Du, Mourad Benamara, B. Li, M. Mortazavi, Shui-Qing Yu, and A Naseem, H., (2015). Enhancement of Material Quality of (Si)GeSn Films Grown by SnCl4 Precursor, ECS Trans. 69(5): 279-286
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SCHOOL OF COMPUTER ENGINEERING AND INFORMATION TECHNOLOGY

Dean: Dr. Sahel Alawneh

Vice Dean: Dr. Ismael Habaabeh

The school of Computer Engineering and Information Technology was founded in 2005. The school offers undergraduate programs in three disciplines and two graduate programs to give students the knowledge and skills they need to succeed in the knowledge and technical professions.

Dedication, collaboration, and inclusiveness are central to our mission. We coordinate with our German partners in teaching, sharing, and disseminating knowledge in order to provide a well-rounded informatics and computing education, as we diligently attend to market needs we acknowledge the importance of knowledge advancement as the primary engine for economic prosperity.

The vision of the school is to foster a high-quality, collaborative, industry-oriented educational model that brings together academic, public, and private institutions and research centers for the fulfillment of national prosperity; to create an atmosphere for applied research and development; and to produce highly skilled graduates who are ready to compete in today's industrial niches. The School provides a unique educational environment. It offers small classes, outstanding facilities, and an extremely supportive staff. In teaching and research, our faculty body is amongst the most caring and committed bodies, providing a dimension of personal attention not often found in similar programs at other peer institutions.

COMPUTER ENGINEERING DEPARTMENT

Head of Department: Dr. Rami Alazrai

Faculty	Rank	Specialization
Prof. Salem Al-Aqtash	Full Professor	Electrical and Computer Engineering
Dr. Sahel Alawneh	AssociateProfessor	Electrical and Computer Engineering
Dr. Rami Alazrai	Assistant Professor	Electrical and Computer Engineering
Dr. Mohammad Daoud	Assistant Professor	Electrical and Computer Engineering
Dr. Firas Al-Houri	Assistant Professor	Computer Engineering
Dr. Ahmad Al-Zmaili	Assistant Professor	Electrical Engineering

The Computer Engineering Department at GJU was established in 2008. The department has 6 faculty members all holding Doctoral degrees from top universities from all around the world. The faculty members are experts in their teaching areas and engaged in research activities in their fields. The Department of Computer Engineering offers the Bachelor of Science (B.Sc.) degree after successfully passing 176 credit hours. Most computer engineering courses have laboratories. During the period of study the students take practical courses in the laboratories of the electrical engineering department. The laboratories included are Microprocessors Laboratory, Digital Systems Laboratory, Embedded Systems Laboratory, Operating Systems Laboratory, and Computer Networks Laboratory. In addition to the bachelor program, this department offers a master's degree in computer engineering with the possibility of obtaining dual degree through our partners in Germany. This program focusses on developing graduates that can support both the local industry and academic needs.

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DEPARTMENT OF COMMUNICATIONS ENGINEERING

Department Head: Dr. Ala' Khalifeh

Faculty	Rank	Specialization
Prof. Labib Al-Khadra	Full Professor	Electrical Engineering
Prof. Nihad Deeb	Full Professor	Electrical Engineering
Dr. Raed Mesleh	Associate Professor	Electrical Engineering
Dr. Ala'a Khalifa	Assistant Professor	Electrical and Computer Engineering

The communication engineering department was established in 2009 and grants bachelor's degree in Communications Engineering. The department includes faculty members specialized in various fields of state-of-the-art technologies such as: wireless communication, fiber optics, electronics, digital signal processing, electromagnetics, microwave and antennas, and communication networks. It aims to graduate highly skilled engineers in Communication Engineering. The department is up-to date with the latest technologies in the field of wireless technologies, such as the Internet of Things and the 5th generation in mobile communication and other emerging technologies. It is anticipated that the demand for wireless communications will increase as a result of the emerging enhancements and innovations in technology, and the increasing reliance of societies/economies on wireless technologies. The department has the following labs and facilities: electronics lab, digital electronics lab, communication circuit lab, digital and analog communication lab, wireless communication lab, and the antenna and microwave lab.

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- 8. Atawi, Al. E., Badarneh, O. M., Aloqlah, M. and Mesleh, R. (2015). Spectrum-sensing in cognitive radio networks over composite multipath/shadowed fading channels', *Computers & Electrical Engineering*, Available online ISSN 0045-7906, http://dx.doi.org/10.1016/j.compeleceng.2015.12.014.
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- Darabkh, K., Awad, A., Khalifeh, A. (2014). Efficient PFD-Based Networking and Buffering Models for Improving Video Quality over Congested Links, Wireless Personal Communications: 79, (1), 293-320, Springer publisher.
- 11. Al-Tamimi, Khalifeh, AK. (2014) .Mobile mules: Modular e-health information synchronization framework, *IEEE Medical Information and communication Technology (ISMICT)*.
- 12. Khalifeh, A., Obermaisser, R., Abuteir, M., Abou-Tair, D. (2014). Systems-of-Systems Framework for Providing Real-time Patient Monitoring and Care, *ACM REHAB 2014*, Germany.
- 13. Muasher, M., Khalifeh, A., (2014). Quality Analysis of VoIP in Real-Time Interactive Systems over Lossy Networks", Fourth International Symposium on Communicability, Computer Graphics and Innovative Design for Interactive Systems (CCGIDIS 2014), Venice, Italy.

DEPARTMENT OF COMPUTER SCIENCE

Department Head: Dr. Samer Nofal

Faculty	Rank	Specialization
Dr. Dia'a Abu Tair	AssociateProfessor	Computer Science
Dr. Ashraf Ahmad	AssociateProfessor	Computer Science
Dr. Samer Nofal	Assistant Professor	Computer Science
Dr. Ismail Hababah	Assistant Professor	Computer Science
Dr. Ahmad Bargash	Assistant Professor	Computer Science
Dr. Christina B Class	Assistant Professor	Computer Science

Computer Science (CS) is centered on the study of information, its storage, management and handling. Such activities comprise the backbone for a knowledge-based economy governing the lifestyles of today's information and knowledge society.

The computer science department provides one undergraduate program in computer science and one graduate program (Master of Enterprise Engineering Systems) in collaboration with Princess Summaya University of Science and Technology PSUT.

- Mowafi, Y., Abou-Tair, D., Zmily, A., Al- Aqarbeh, T., Abilov, M., and Dmitriyevr, V. (2015) .Exploring a
 context- based network access control for mobile devices. In *Proceedings of the 2015 International*Conference on Soft Computing and Software Engineering, SCSE'15, Berkeley, CA, USA, pages 547–554
- 2. Class, Ch. and Rehak, R. (2015). Gewissensbits Wie würden Sie urteilen? Fallbeispiel Das Assoziationsmodul". *Informatik Spektrum*, 38(2).
- 3. Class, Ch. and Weber-Wulff, D. (2015) .Gewissensbits Wie würden Sie urteilen? Fallbeispiel Das selbstfahrende Auto". *Informatik Spektrum*, 38(6).
- Class, Ch. (2014) .Gewissensbisse Fallstudien für den universitären Informatik-Unterricht. In Peter Bittner, Stefan Hügel, Hans-Jörg Kreowski, Dietrich Meyer-Ebrecht, and Britta Schinzel, editors, Gesellschaftliche Verantwortung in der digital vernetzten Welt. LIT Verlag.
- 5. Class, Ch. (2014) .The Influence of Class Order on Rule Induction Results". In The Fifth International Conference on Information and Communication Systems (ICICS 2014),
- 6. Class, Ch. and Kühne, c. (2014). Gewissensbits –Wie würden Sie urteilen? Fallbeispiel Drohnenprojekt. *Informatik Spektrum*, 37(2).
- 7. Class, Ch., Weber-Wulff, D., and Preuss, T., (2014). Gewissensbits Wie würden Sie urteilen? Fallbeispiel Data Mining fur Public Health. *Informatik Spektrum*, 37(1).
- 8. Hababeh, I., Al-Sayyed, R.M.H., Alqatawna, J., Majdalawi, Y., Nabelsi, M. (2014) .Modeling and Simulation Study of Space Data Link Protocol. *International Journal of Communications*, Network and System Sciences, 7, 440-452.
- Abu-Saymeh, D., Abou-Tair, D., and Zmily, A., (2013). An application security framework for near field communication, In 12th IEEE International Conference on Trust, Security and Privacy in Computing and Communications, TrustCom 2013, Melbourne, Australia, pages 396–403.
- Zmily, A., Class, B., Mowafi, Y., and Abu-Saymeh, D. (2013) . An Interactive Educational Environment for Preschool Children, In Workshop on Interaction Design in Educational Environments (IDEE 2013) at ICEIS 2013
- 11. Bourimi, M., Kesdogan, D., Heupel, M., Abou-Tair, D., and Lambropoulos, N., (2013) .Pets at CSCL service: Underutilised potentials for privacy enhancing distance education. *J. UCS*, 19(7): 912–931.
- 12. Hababeh, I., Khalil, I., Khreishah, A., Bataineh, S. (2013). Performance Evaluation of Wormhole Security Approaches For Ad-Hoc Networks, Journal of Computer Science. 9, (12):1626-1637.
- 13. Bourimi, M., Barth, T., Kesdogan, D., Abou-Tair, D. (2012). Fabian Hermann, and Simon Thiel. Using distributed user interfaces in collaborative, secure, and privacy-preserving software environments. *Int. J. Hum. Comput. Interaction*, 28(11): 748–753.
- 14. Class, Ch. (2012) .Bridging Cultural Differences in Teaching Computer Ethics An Example Using Personal Portfolios. *SIGCAS Computers and Society*, 42(2.

- 15. Muhaidat, A., Al-Addous, M., Alawneh, F., and Class, Ch. (2012) .A Photovoltaic System for Small Scale Brackish Water Desalination in Remote Areas, *In International Conference on Solar energy for MENA region (INCOSOL)*.
- 16. Weber-Wulff, D., and Class, Ch. (2012). Gewissensbits Wie würden Sie urteilen? Fallbeispiel Planungen, *Informatik Spektrum*, 35(3).
- 17. Weber-Wulff, D., and Class, Ch. (2012) .Gewissensbits Wie würden Sie urteilen? Fallbeispiel Pseudokonferenz? *Informatik Spektrum*, 35(5).
- 18. Hababeh, I. (2012) .Improving Network Systems Performance by Clustering Distributed Database Sites, *The Journal of Supercomputing*. Springer. 59, (1): 249-267.
- 19. Nofal, S., Dunne, P., and Atkinson, K. (2012). Towards experimental algorithms for abstract argumentation". *In Computational Models of Argument Proceedings of COMMA 2012*, Vienna, Austria, pages 217–228.
- Bourimi, M., Jörn Ossowski, J., Abou-Tair, D., Berlik, S., and Abu-Saymeh, D. (2011) .Towards usable client-centric privacy advisory for mobile collaborative applications based on bdds, In 4th IFIP International Conference on New Technologies, Mobility and Security, NTMS 2011, Paris, France, pages 1–6.
- 21. Abou-Tair, D., Köster, I., and Höfke, K. (2011). Security and privacy requirements in interactive TV. *Multimedia Syst.*, 17(5):393–408.
- 22. Class, Ch. and Weber-Wulff, D. (2011).Gewissensbits Wie würden Sie urteilen? Fallbeispiel Supergrade, *Informatik Spektrum*, 34(4).
- 23. Al-Addous, M., and Class, Ch. (2011) .Acquiring expertise in a lab for solar energy technologies, *In IEEE EDUCON 2011, Learning Environments and Ecosystems in Engineering*.
- 24. Weber-Wulff, D., Class, Ch., Coy, W., Kurz, C., Ullrich, S., and Zellhöfer, D., (2011). Whistleblower-Plattform, In M. Maring, editor, Fallstudien zu Ethik in Wissenschaft, Wirtschaft, Technik und Gesellschaft. KIT Scientific Publishing.
- 25. Al-Addous, M., and Class, Ch. (2011). Design and Evaluation of an Instructional Solar Energy Technologies Lab, *International Journal of Online Engineering (IJOE)*, 7(1):6–13
- 26. Class, Ch. (2011). An Approach for Teaching New Technologies and Life-Long Learning Skills, *In IEEE EDUCON 2011, Learning Environments and Ecosystems in Engineering*.
- 27. Class, Ch. and Zellhöfer, D. (2011) .Gewissensbits Wie würden Sie urteilen? Fallbeispiel Bewerbungsportal. *Informatik Spektrum*, 34(6).
- 28. Hababeh, I. (2011). A Novel Cloud Computing Data Fragmentation Service Design for Distributed Systems, International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 2011). Las Vegas, Nevada, USA.
- 29. Class, Ch. and Zellhöfer, D. (2010) .Gewissensbits Wie würden Sie urteilen? Fallbeispiel Anonymisierer, Informatik *Spektrum*, 33(4).
- 30. Class, Ch. and Zellhöfer, D. (2010). Gewissensbits Wie würden Sie urteilen? Fallbeispiel Online-Banking, Informatik *Spektrum*, 33(3).

- 31. Bourimi, M., Kühnel, F., Haake, J., Abou- Tair, D., and Dogan Kesdogan, D. (2009) Tailoring collaboration according privacy needs in real-identity collaborative systems. In Groupware: Design, Implementation, and Use, 15th International Workshop, CRIWG 2009, Peso da R'egua, Douro, Portugal, Proceedings, pages 110–125.
- 32. Class, Ch. (2009). Ethical Issues related to the Use of E-Portfolios. In P. Baumgartner, S. Zauchner, and R. Bauer, editors, *The Potential of E- Portfolios in Higher Education*. Studienverlag.
- 33. Class, Ch. (2009) .ICT Based Education for Cultural Literacy? In Ubiquitous ICT for Sustainable Education and Cultural Literacy, number 84. *Publications of the Finnish National Commission for UNESCO*.
- 34. Class, Ch. and Weber-Wulff, D., (2009). Gewissensbits Wie würden Sie urteilen? Fallbeispiel Medizinische Datensammlung". *Informatik Spektrum*, 32(5).
- 35. Weber-Wulff, D., Class, Ch. , Coy, W., Kurz, C., and Zellhöferm, D. (2009). Gewissensbisse Ethische Probleme der Informatik Biometrie Datenschutz geistiges Eigentum. *Transcript Verlag*.
- 36. Weber-Wulff, D., Class, Ch., Coy, W., Kurz, C., and Zellhöferm, D. (2009). Gewissensbits Wie würden Sie urteilen?" *Informatik Spektrum*, 32(4).
- 37. Class, Ch., Qualität, S., (2008). Ethik und wir alle. FIfF- Kommunikation, (3):28-30.
- 38. Class, Ch. (2008). Von Räumen und Virtuellen Räumen. In G. Imhof, U. Gruäter, B. Hunziker, J. Ittig, and B. Henzirohs, editors, Technik + Architektur 1958-2008". *Hochschule Luzern Technik und Architektur*.

SCHOOL OF MANAGEMENT AND LOGISTICS SCIENCES

Dean: Dr. Loay Salhieh

Vice Dean: Dr. Ghazi Samawi

The School of Management and Logistic Sciences (SMLS) was established in 2005, (SMLS) is dedicated to fostering an environment that promotes high quality education and diverse learning experiences for all students. A collaborative learning approach is at the heart of the school curriculum, which is supported by an international exchange program.

This program provides students with an opportunity to acquire knowledge and competencies within an international setting in order to gain an edge in today's global business environment. A business degree from SMLS represents more than an accumulation of knowledge pertaining to business theory and methodology; it embodies a higher level understanding of management practices in real-life situations, and arms students with the skills and knowledge they need to succeed in the modern world.

SMLS is committed to contribute to the national and international workforce with potential highly qualified graduates who can conduct their adequate leadership training within the local and global markets. SMLS aspires to be globally distinguished throughout its sophisticated academic programs, adequate modern teaching methods, reputable professional team of lecturers, one-year internship and exchange programs with German Universities, and practical training experiences within both German business workforce and local companies.

SMLS is looking to instill the values of excellence and innovation in our students in order to empower them to play a positive and active role in their society. Through cooperation and collaboration with our partner universities, as well as the public and private sector, we deliver a distinctive learning experience that focuses on balancing theoretical and practical knowledge.

DEPARTMENT OF MANAGEMENT SCIENCES

Chair: Dr. Metri Mdanat

Faculty	Rank	Specialization
Dr. Metri Mdanat	Associate Professor	International Economic
Dr. Ghazi Samawi	Associate Professor	Economic
Dr. Serena Sandri	Assistant Professor	International Economic
Dr. Mohammad Ta'amnha	Assistant Professor	Human Resource Management
Dr. Omar Alshubailat	Assistant Professor	Industrial Engineering
Dr. Raed Alkhasawneh	Assistant Professor	Economic
Dr. Fathi Yousef	Assistant Professor	Human Resource Management
Dr. Rana Sabri	Assistant Professor	Management Science and Finance
Dr. Aziz Madi	Assistant Professor	Management information / knowledge management systems

Omar Bwaliz	Instructor	Industrial Engineering
Montaser Tawalbeh	Lecturer	Commercial Law
Ghadeer Khartabil	Lecturer	Economic

The department of management sciences offers high quality, hands-on education to prepare students for professional careers in business. The courses and programs offered by the department are designed to provide the students with the leadership and administrative skills necessary to succeed in today's business environment. The department has also a strong enterprise agenda fostered by its close link to the industry. This strong college industry interface is used to facilitate industry interaction and hands on training. The Department has acquired the services of highly qualified faculty. It includes those holding Ph. D degrees and MBAs with professional executive experience. A variety of teaching and learning techniques including lectures, case studies, field trips and simulation business games are employed to reinforce the knowledge and skills learned by students.

PUBLICATIONS

- 1. Sandri, S., (2015). The Need for Entrepreneurial Education in Jordan An Empirical Investigation. Jordan Journal of Business Administration, forthcoming.
- Fayyad, M., Sandri, S., Weiter, M. & Zikos, D., (2015). Social Water Studies in the Arab Region. State of the Art and Perspectives, Entwicklungspolitische Themenreihe des Seminars für ländliche Entwicklung, Band 4, Berlin.
- 3. Alkhawaga, A., Belakhdar, N., Eickhof, I., Elkhawaga, O., Hamada, A., Harders, C. & Sandri S., (2014). Arab Revolutions and Beyond: Change and Persistence, Center for Middle Eastern and North African Politics, Working Paper No. 11.
- 4. Mußhoff, O., Odening, M., Schade, C., Maart, S. C. & Sandri, S., (2013). Inertia in Disinvestment Decision: Experimental Evidence, European Review of Agricultural Economics (2013) 40 (3): 463-485, doi: 10.1093/erae/jbs032
- 5. Sandri, S., Hauke, C. & Dornberger, U. (2013). Studie zur Innovations- und Wettbewerbsfähigkeit der Pharmazeutischen Industrie in Jordanien. SEPT working papers, University of Leipzig, no. 22, 2013

DEPARTMENT OF LOGISTICS SCIENCES

Chair: Dr. Ismail Abushaikha

Faculty	Rank	Specialization
Dr. Loay Salhieh	Associate Professor	Industrial Engineering
Dr. Abdullah Abdullah	Associate Professor	Industrial Engineering
Dr. Ismail Abushaikha	Assistant Professor	Logistics Sciences
Dr. Mohammad Alshbol	Assistant Professor	Supply Chain Management
Dr. Abdulraheem Alsosi	Assistant Professor	Logistics and Operation Management
Nizar Alshbaikat	Lecturer	Logistics Sciences
Ahmed Alabadleh	Lecturer	Supply Chain Management

The Logistic Sciences department is a pioneer as it offers the first Logistics degree in Jordan and the Arab region. Logistics and supply chain management has become very important to maintain competitive advantage and ensure operational excellence due to several factors. These factors are affected by recent market changes including globalization, increased competition, advances in information technology and increased customer expectations. The program aims to provide students with the required skills to build and manage product and information flow within supply chain systems. The program provide students with knowledge and skills in three different pillars; logistics processes expertise, analytical capabilities to support decision making, and utilizing information technology to facilitate business supply chain operations. The logistics program has an interdisciplinary nature to achieve the expected outcome. The department courses are taught by faculty and industry experts with tens of years of industrial experience enabling students to relate the theory and practice in the field.

The program provides an interdisciplinary educational foundation for its graduates to understand problems and to find and implement solutions with a system engineering perspective; students are provided with the essential tools to consider the technological, business and human aspects of problems in complex systems. The program consists of the following areas of study: basic sciences; engineering materials and manufacturing processes; statistics and quality management; optimization, operations management and managerial sciences, ergonomics, economics and finance, and informatics. The department offers a B.Sc. in Industrial Engineering.

PUBLICATIONS

- 1. Saleh, W., and Salhieh, S., (2014). An Investigation of Entrepreneurial Intention amongst Arab University Students. *International Journal of Business and Management*; 9(12).
- 2. Salhieh, L., and Mashal, A. (2011). Are We Ready for Knowledge Economy in Jordan? Journal of the Knowledge Economy, 2(3).
- 3. Salhieh, L., Abu-Doleh, J.D., and Hijazi, N. (2011). The Assessment of E-banking Readiness in Jordan. *International Journal of Islamic and Middle Eastern Finance and Management.*, 4(4):325 342.
- 4. Salhieh, L. (2011). An Exploratory study of the relationship between supply chain management practices and technical efficiency of Jordanian manufacturing companies, *International Journal of Business and Management*, 6(12).

5.

DEPARTMENT OF INTERNATIONAL ACCOUNTING

Chair: Dr. Ali Attar

Faculty	Rank	Specialization
Dr. Ali Attar	Assistant Professor	Accounting
Dr. Ahmed Abulkhail	Assistant Professor	Managerial Accounting
Dr. Malek Alsharairi	Assistant Professor	Accounting
Dr. Bassam Ma'ali	Assistant Professor	Accounting
Dr. Mohammad Alomari	Assistant Professor	Financial Sciences
Dr. Marwan Al-zubi	Practitioner Professor	Finance

Loay Aburajab	Instructor	Finance and Accounting
Lama Obaiedat	Instructor	Accounting
Balqees Setaboha	Lecturer	Banking and Financial Sciences

The International Accounting department offers a unique student experience through the international aspect of studying both in Jordan and Germany, and constantly dealing hands-on with international accounting legislation. The department seeks to provide quality education to students that is relevant to the working environment, for instance through application-based courses. The International Accounting degree equips students with knowledge in a variety of subjects, including all aspects of accounting, in particular legislation according to International Accounting Standards and US Generally Accepted Accounting Principles. Students shall be trained to work in all areas of accounting, such as controlling, auditing and financial consultancy, and therefore be employable of fields of business. In this context, the department's aim is to employ staff with PhD and MBA qualifications from well-known home and international institutions, in order to provide the quality input the educational experience requires.

- 1. Gleason, K.C., Alsharairi, M., and Kanaan, Y. (2015) .Bidder Earnings Management, Cynical Targets and Acquisition Premia. *Quarterly Journal of Finance and Accounting*, 52(1-2): pp. 1-40. (Rank "B" according to ABDC Journal Quality list)
- Ja'arah, O. Ma'ali, B. and Ka'beer, M. (2015), Measuring Appropriateness of Procedures of the Jordanian Audi Bureau to the Efforts of Anti- Corruption, Dirasat: Administrative Sciences, 42(2):73-492. (University of Jordan)
- 3. Al-Hamadeen, R., and Alsharairi, M. (2014). Financing Higher Education Institutions: Experience of the Jordanian Public Universities. *Research Journal of Finance and Accounting*, 5(8: 185-194. (Indexed in EBSCO & Ulrich)
- 4. Bozos, K., Ratnaike, Y. C., and Alsharairi, M. (2014) .How has the international harmonization of financial reporting standards affected merger premiums within the European Union?" *International Review of Financial Analysis*, 31(0): 48-60. (Rank "A" according to *ABDC Journal Quality list*)
- El-Jajawy, Al., and Alsharairi. (2014) .The Impact of Adopting International Accounting Standards in the Kuwait Environment: The Perspective of Accountants, Auditors and Academicians, *Iraqi Journal for Administrative Sciences*. 9(40): 26-45.
- 6. Abu-Alkheil, A., Khan, W., & Burghof, H-P. (2013) .Comparative Performance of Islamic and Conventional Banks in Europe", *American J. of Finance and Accounting*, 3(1): 1-23.
- 7. Abu-Alkheil, A., Khan, W., &Burghof, H-P. (2012) .Islamic Commercial Banking in Europe: A Cross-Country and Inter-Bank Analysis of Efficiency Performance, *International Business & Economics Research Journal*, 11(6): 647-676.
- 8. Abu-Alkheil, A., Khan, W., & Burghof, H-P. (2012) .Comparison of Efficiency and Productivity changes of Islamic and Conventional Banks: Evidence from Europe and Muslim-majority countries, *Journal of Applied Business Research*, 28 (6): 1385-1412.
- 9. Alsharairi, M., and Salama. (2012) .Does Leverage Impact Earnings Management? Evidence from US Non-cash Acquirers, *Journal of Financial and Economic Practice*, 12(1): 17-33. (Rank "C" according to ABDC Journal Quality list)

SCHOOL OF NATURAL RESOURCES ENGINEERING AND MANAGEMENT

Dean: Dr. Munjed Al-Sharif

Founded in 2005, The School of Natural Resources Engineering and Management (SNREM) is comprised of two Departments:

- Department of Energy Engineering.
- Department of Water and Environmental Engineering.

The SNREM vision is to be Jordan's leading research and teaching School with a reputation for excellence in scholarship and industrial cooperation, and to achieve regional recognition in the fields of Energy, Water, and Environment Engineering, in both worlds of research and academia.

Our mission is to transfer leading edge technologies in Energy, Water and Environmental Engineering into our community and throughout the region leveraging the unique abilities of GJU graduates. Allowing as well, a stronger engagement in research and development ventures, that would contribute to addressing many challenges facing energy, water and environmental sectors in Jordan and the region.

Bestowed with a professional group of faculty members and staff, the school conjointly has industrial professors and flying faculty from Germany, of whom 20 hold PhD degrees from the world's most prestigious and reputable universities.

At the beginning of the Academic Year 2008/2009, the total student enrollment in the School was 82 students in all. The number has gone up to more than 500 students in 2015/2016.

The School has many teaching and research laboratories in Energy and Water and Environment. Additionally, the school has access to all labs and faculties allocated at other GJU schools.

Our programs are unique in many ways, they are designed along the German Applied Universities model. They aim to develop and foster well-educated graduates with the practical skills, attributes and knowledge that enable them to practice effectively as professional engineers.

DEPARTMENT: ENERGY ENGINEERING DEPARTMENT

Head: Dr. Ammar Alkhalidi

Faculty	Rank	Specialization
Ahmad Harb	Professor	Electrical Engineering
Ammar Alkhalidi	Assistant Professor	Mechanical Engineering
Mohammad Al-Addous	Assistant Professor	Energy Engineering
Zakariya Dalalah	Assistant Professor	Electrical Engineering
Louy Qoaider	Assistant Professor	Mechanical Engineering
Firas Alawneh	Industrial Professor	Electrical Engineering

Energy crises constitutes some of the most pressing issues evident to everybody. One of the options is to look for new sources of sustainable energy. Renewable energy is available in all kinds of forms: Solar, Wind, and Biogas to mention just a few. Therefore, GJU has established this unique Department to respond to the urgent need for graduates equipped with the proper knowledge in the field of energy engineering. The uniqueness of this Department arises from the type of education it provides for Jordan and the entire region for the first time.

Energy Technology refers to the knowledge of and usage skills required for conversion, production, transfer, distribution and use of energy. This leads to the mastering of technology based on the laws of nature, as a result of which different forms of energy can be used to serve the needs of mankind in such a way that nature is spared and the limited economic resources of society are taken into consideration.

Energy and the environment is a new and rapidly growing field of sustainability, which is "meeting the needs of the future without compromising the ability of future generations". This is critically relevant to how it evolves in the near future.

Solving global energy problems poses a great challenge to human ingenuity. What would make a reliably lasting source of energy for years to come? Is it oil, nuclear energy, or would it be renewable energy sources, viz., Solar, Wind, Water, biomass, waves ...etc.

Most countries around the world have declared strategies to switch towards renewable energy sources away from the use of fossil fuels. It is incumbent upon every society to implement this imperative, to preserve energy efficiency and reduce/eliminate environmental pollution.

The study program of energy engineering offers students the opportunity to acquire extensive skills for jobs that require expertise in energy technology across all sectors of society.

The study program is designed to give a graduate with a B.Sc. degree of engineering in energy technology diverse skills in the dimensioning of equipment in the field of energy technology and in the technical and economical design of equipment and distribution systems.

The areas of emphasis of the degree program are technical expertise, the management of environmental effects in energy-economic processes, the business economic design of an entire energy conversion cycle, production, distribution, and usage processes, environmental technology and international energy business.

The Energy Engineering Program consists of two specializations (streams) as follows:

- A: Electric Power Engineering
- B: Renewable Energy Engineering

- 1. Alkhalidi, A., Jarad ,H., Juaidy ,M., Qoaider, L., .(2015). Glass Properties Selection For Core And Shell High Rise Residential Building In Moderate Climate, 5th Jordanian IIR Conference on Refrigeration and Air Conditioning, 5th JIIRCRAC, Aqaba, Jordan.
- 2. AlGharabli, S., Azzam, M., Al-Addous, M. (2015) .Microwave-Assisted Extraction of Shale Oil from Jordanian Oil Shale, *Oil Shale Journal*.
- SZahid, Z.U., Dalala, Z., Chen, R., Chen, B., Jih-sheng Lai. (2015) .Design of Bidirectional DC-DC Resonant Converter for Vehicle-to-Grid (V2G) Applications" *IEEE Transactions on Transportation Electrification*, PP(99).
- 4. Zahid, Z.U., Dalala, Z.M., Cong Zheng, Rui Chen, Faraci, W.E., Lai, J.-S.J., Lisi, G., Anderson, D. (2015). Modeling and Control of Series-Series Compensated Inductive Power Transfer System", *IEEE Journal of Emerging and Selected Topics in Power Electronics*, 3(1).
- 5. Al Sharif, S., and Harb, A. (2015) .Control of Instable Chaotic Small Power System, *Journal of Power and Energy Engineering* 3, 1-7.
- 6. Harb, Sh., Batarseh, I., Harb, A., (2015) .Development, Implementation, Assessment of a Web-based Circuit Solver for Teaching Basic Electrical Circuits Theory., *International Journal of Online Engineering (iJOE) Journal*.
- 7. Qoaider, L., Liqreina A. (2015). Optimization of dry cooled parabolic trough (CSP) plants for the desert regions of the Middle East and North Africa (MENA), *Solar Energy* 122:976–985
- 1. Qoaider, L. (2015). Energy Engineering in Jordan State of the Art and Trends, State of the Art challenges and trends in energy and water in Africa, Abou Bekr Belkaid University of Tlemcen, Algeria.
- 2. Qoaider, L. (2015). Concentrating Solar Power a Feasible Option for MENA Region, State of the Art-challenges and trends in energy and water in Africa, Abou Bekr Belkaid University of Tlemcen, Algeria.
- 3. Qoaider, L. (2015). Development of Solar Energy Sector in the Arab Region, EWACC2015 Building Bridges Conference, Nicosia Cyprus.
- 4. Alkhalidi, A. and Amano, R.S., (2014). Factors Affecting Fine Bubble Creation and Bubble Size for Activated Sludge," *Water and Environment Journal*, DOI: 10.1111/wej.12083.
- 5. Alkhalidi, A., Qandil, M., Qandil, H. (2014). Analysis of Ocean Thermal Energy Conversion Power Plant using Isobutane as the Working Fluid, *Int. J. of Thermal & Environmental Engineering* 7 (1): 25-32, DOI: 10.5383/ijtee.07.01.004.
- 6. Zahid, Z.U., Dalala., Z., ai, J.-S.J. (2014) .Design and Control of Bidirectional Resonant Converter for Vehicle-to-Grid (V2G) Applications" *IEEE IECON2014-40th Annual Conference of the IEEE*.
- 7. Zahid, Z.U., Dalala, Z., Lai, J.-S.J. (2014). Small Signal Modeling of Series-Series Compensated Induction Power Transfer System, Twenty Ninth Annual IEEE Applied Power Electronics Conference and Exposition (APEC).
- 8. Harb, A. and Ayoub, N. (2014). On Slide Mode Control of Chaotic Rikitake Two-Disk Dynamo—Chaotic Simulations of the Reversals of the Earth's Magnetic Field. *IJMNTA*, 03(03): 136-143.

- 9. Al Sharif, S., Harb, A., Haibing Hu, Batarseh, I.(2014) .An Experimental Simulation of a Design Three-Port DC-DC Converter, *Circuits and Systems Journal*, 5: 238-251.
- 10. Liqreina, A., Qoaider, L. (2014). Dry cooling of concentrating solar power (CSP) plants, an economic competitive option for the desert regions of the MENA Region, *Solar Energy* 103: 417–424.
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WATER AND ENVIRONMENTAL ENGINEERING

Head: Dr. Qasem Abdelal

Faculty	Rank	Specialization
Dr. Nizar Abu-Jaber	Professor	Earth and Atmospheric Sciences
Dr. Muna Hindiyeh	Associate Professor	Water Quality
Dr. Munjed Al-Sharif	Assistant Professor	Water resources and Environmental Engineering
Dr. Qasem Abdelal	Assistant Professor	Civil and Environmental Engineering
Dr. Jamal Nejem	Assistant Professor	Civil and Environmental Engineering

Dr. Arwa Abdelhay	Assistant Professor	Chemical Engineering
Dr. Abdallah Malkawi	Assistant Professor	Geo-technical Engineering
Dr. Muna Albanna	Assistant Professor	Environmental Engineering
Dr. Mohammad Smadi	Assistant Professor	Land and Water Resources Engineering
Eng. Fatimeh Hadidi	Instructor	Water and Environmental Engineering

With the natural water scarcity in the region as a whole and Jordan in particular, with the rapid and unnatural increase in population due to fluxes of refugees, and with the climate change that adversely impacts our already short water supply, it makes perfect sense that water and environmental issues are very high on everyone's agenda.

Food, Water and Energy are perhaps the three main focal points of the whole world now. One has to manage the three simultaneously to ensure a sustainable supply. This is why our school of Natural Resources Engineering has the two departments of Water and Environmental Engineering and Energy Engineering. This reflects the far sight GJU has and its progressive model of teaching engineering.

Our vision at the Department of Water and Environmental Engineering, the German Jordanian University (GJU), is to be the lead educator of young engineers in the fields of water and environment in Jordan and the region.

To realize this vision, our mission is to:

- Provide the suitable educational experience to our students where they are educated, challenged, and their leadership skills enhanced.
- Attract the best educators with a diverse background experience and knowledge and excellent communication abilities.
- Encourage interaction between the various national and international water and environment stakeholders and our department's students and educators.

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TALAL ABU-GHAZALEH GRADUATE SCHOOL OF BUSINESS

Dean: Prof. Mamoun Akroush Vice Dean: Dr. Majdy Zuriekat

Talal Abu-Ghazaleh Graduate School of Business (TAG-SB) is considered the first School of its kind that represents a partnership between the public and private sectors in the governmental academic sector in the Arab world. It is one of the main Faculties at the German-Jordan University; this exceptional and unique partnership combines Talal Abu-Ghazaleh Organization's experience in business and the academic world of the German-Jordanian University.

A host of experts in the field of academia produced TAG-SB's programs, focusing on global economy, opportunities and future challenges in the business world. Talal Abu-Ghazaleh Organization dedicated its financial and human resources in addition to its expertise in serving this important academic monument that led to placing TAG-SB in a prestigious and distinct standing among all business schools in the Arab world.

TAG-SB's message is a reflection to its dedication of serving students and academic excellence towards regional development through "supplying Arab and global markets with qualified leaders in various business sectors through applying modern and distinguished professional and academic programs" and that is why only distinguished students are accepted, where they are provided with programs, training, tools and the environment they need to progress to become distinguished leaders who contribute effectively in shaping the future.

TAG-SB focuses on critical thinking and the ability to solve problems and on communication skills, in addition to providing the necessary knowledge in various sectors and specializations. TAG-SB grants MBA with concentration on the following fields:

- Management.
- Quality Management.
- Logistics Science.
- Human Resources Management.
- Marketing.
- Banking and Finance.

Faculty	Rank	Specialization
Prof. Mamoun Akroush	Professor	Marketing
Prof. Hesham Ghariabeh	Professor	Financial Management
Dr. Loay Salhieh	Associate Professor	Industrial Engineering
Dr. Samer AlMohammad	Associate Professor	Marketing
Dr. Bana AbuZayed	Associate Professor	Banking & Finance
Dr. Majdy Zuriekat	Associate Professor	Accounting
Dr. Abdallah Abdallah	Associate Professor	Quality Management
Dr. Muhannad Atmeh	Assistant Professor	Accounting
Dr. Heba Ajlouni	Assistant Professor	Finance
Dr. Kawlah Obeidat	Assistant Professor	Measurement & Statistics

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