



UNIVERSITY OF BAHRAIN
COLLEGE OF ENGINEERING

SENIOR PROJECTS EXHIBITION

FIRST SEMESTER
2022/2023

SPONSORED BY



16 FEB. 2023





Her Excellency Dr. Jawaher Shaheen Al-Mudhahka
President of University of Bahrain





Dr. Haifa Bint Ebrahim Al-Khalifa
Dean of College of Engineering



Senior Projects Scientific Committee Members



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Department of Civil Engineering



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Senior Projects Guidelines

Objectives of senior project:

After completing senior project course, the student should be able to

- a. Design of a component, system, or process to meet a desired need using realistic multiple constraints and engineering standards.
- b. Develop skill in exchanging technical ideas about the work with other students
- c. Develop self-study self-learning capability in solving engineering problems.
- d. Develop skill for conducting and designing engineering experiments.
- e. Develop skill in using effectively software tools in the analysis and design.
- f. Develop skill in searching for technical documentation, report writing and oral presentation.

Requirements for senior project:

- a. The projects should be design oriented. Design is a decision making process based on engineering calculations to achieve desired needs. It is usually iterative i.e. several cases may be considered and solved to select the most appropriate case based on a set of constraints that are prepared predefined, such as economic, environmental, ethical, etc. So the constraints need to be decided ahead
- b. Students must practice team work during the design and show evidence of team work, such as minutes of group meetings stating who was present and what each student said and discussed and most importantly, what were the duties given to each member of the team and the progress in completing these duties.
- c. Draft project reports must be read and revised by the supervisors and the notes for corrections suggested by the supervisor must be shown on the draft report. Students make corrections as instructed by the projects supervisor in the final version of the report. Both of the draft copy (only one copy, showing the supervisors notes) and the final copy of the report (three copies) should be submitted by the student. The draft report will not be used in grading but will be needed for ABET purposes.
- d. The Student must show in his report evidence of his knowledge of contemporary issues (e.g. globalization of economy, global warming, nanotechnology, etc) related to his field of specialization, knowledge of broad education (e.g. impact of engineering on environment, health, society, etc) and evidence of lifelong learning (e.g. what new topics did he learn on his own, including software package and other skills and information). The student must write a paragraph in his report about how the project has helped him in either learning or implementing and applying each of these issues.
- e. Plagiarism (i.e. copying other people's work, whether from the internet or previous reports or books) cannot be tolerated. In such cases, the report should be rejected and the students will have to rewrite the report, but with his own writing and results. Anything work from the literature should be properly referenced, and if full text are taken then they should be placed between "Quotes followed by the reference. In any case quoted material should be very limited, and should be avoided.



Department of Civil Engineering

Senior Design Projects of Civil Engineering, 1st Semester 2022-2023

Senior Project Coordinator: Dr. Semih Erhan

No	Student ID	Student Name	Project Title	Supervisor
1	20183822	Saleh Mahdi Almadhoob	Comprehensive Design of Prestressed Bridge for Bahrain Metro	Dr. Mahmood Jahjough
	20183825	Ahmed Mohamed Mahdi		
2	20166627	Nader A.Moneim Ghonim	Green Design for the Engineering Library Building	Dr. Abdulhamid Irhouma
	20182428	Abdelrahman Ali Sedky		
	20182487	Mostafa Ehab Elsaid		
3	20182996	Husain Ali Mohammed	Design of a Mosque with Large Dome with Minimum Number of Columns	Dr. Shah Alam
	20183076	Abdulla Majeed Alsehlawi		
	20186363	Ahmed Hasan Ahmed		
4	20185587	Yusuf Abdulla Alhammadi	Design and Optimization of RC Retaining Walls	Dr. Mahmood Jahjough
	20181900	Omar Waleed Ali Alyahya		
	20189107	Anas Abdulhameed Ahmed		
5	20180511	Mohamed Abdulla A.Rahim	Design of Multistorey Mall in Zallaq	Dr. Muhammad Ajmal
	20181835	Mohamed Moosa Aldoseri		
6	20154099	Ali Mohamed Abdulhusain	10 Stories Hotel Building: Sustainable / Green Design	Dr. Abdulhamid Irhouma
	20150811	Ali Husain Alkhabbaz		
	20150598	Mohamed Saeed Ahmed		
7	20180286	Bader Abdulhadi Hasan Ali	Design of Interchange at Bu-quwah	Dr. Uneb Gazdar
	20185523	Abdulla Mohamed Mesbah		
8	20187939	Maria Khalifa Hasan Ali	Design of High-Rise Green Building	Dr. Muhammad Ajmal
	20188630	Wasan Rafiq Husni Alqab		
9	20183820	Muntadher Husain Saeed	Design of RC Pedestrian Bridge Over Al Fatih Highway	Dr. Muhammad Ajmal
	20186157	Ammar Abdulla Mansoor		
10	20184476	Sara Khamis Ali Khamis	Design and Management of Greywater and Industrial Water System for Industrial District.	Dr. Nageeb Ghaleb
	20184612	Zainab Ali Abu Jawher		
	20181409	Maryam Raed Mahdi Hasan		
11	20153096	Mahmood Isa Ali Yateem	Design of wastewater collection system in Al-hidd area - Block 111	Dr. Nageeb Ghaleb
	20157614	Mahmood Ziad Arafat		
	20183814	Batool Majeed Alkhabbaz		
12	20186671	Khalil Ebrahim Sabeel	Design a Pedestrian Bridge with Prestressed Concrete Girder in Sheikh Jaber Al-Ahmad Al-Sabah highway	Dr. Semih Erhan
	20175785	Sadeq Abdulhusain Hamza		
13	20196701	Bayan Kadhem Saleh	Design of a Single Span Bridge with Bulb-T Girders	Dr. Semih Erhan
	20181326	Batool Husain Mohamed		
	20183095	Maram Sayed Abdulla Taqi		
14	20174285	Ola Hasan Alshuwaikh	Design of Single-Cell Precast Segmental Box Girder Bridge	Dr. Semih Erhan
	20183365	Sara Fadhel Ali Ali		
	20188000	Fatema Mohamed Abdulla		
15	20162661	Zainab Ali Ahmed Hubail	Design, Construction, and Testing of an Sprinkler Irrigation System	Dr. Fuad Musleh
	20182892	Huda Ahmed Hasan Muftah		
16	20145532	Zainab Hassan Ahmed	A Comparative study of the water use practices in Bahrain with suggested improvement methods to the use of treated water in different aspects keeping the engineering standards, Supported by Public Opinion Surveys	Dr. Fuad Musleh
	20150254	Mohamed Jaafar Ali		
	20146346	Ali Aqeel Hayyat		

Best Projects of Civil Engineering, 1st Semester, 2022-2023

The 1st Place:

No	Student ID	Student Name	Project Title	Supervisor
1	20187939	Maria Khalifa Hasan Ali	Design of High-Rise Green Building	Dr. Muhammad Ajmal
	20188630	Wasan Rafiq Husni Alqab		

The 2nd Place:

No	Student ID	Student Name	Project Title	Supervisor
2	20183822	Saleh Mahdi Saleh Almadhoob	Comprehensive Design of Prestressed Bridge for Bahrain Metro	Dr. Mahmood Jahjough
	20183825	Ahmed Mohamed Mahdi Hasan		

External Examiners

Eng. Mr. Adel Amir Bin Rajab



Eng. Mr. Adel Amir Bin Rajab graduated from University of Bahrain with a BSc. Degree in Civil Engineering. He has also earned a MSc. Degree in Civil Engineering at University of Bahrain. He has experienced on management of housing projects, infrastructure works, affordable housing and sustainability. He has been working as Acting Director & Chief of Design Section in Ministry of Housing since 2011.

Eng. Mr. Aeed Khalil Shahada



Eng. Mr. Aeed Khalil Shahada graduated from University of Bahrain with a BSc. Degree in Civil Engineering. He has also earned a MSc. Degree in in Engineering Management at University of Bahrain. He has been head of network construction supervision group of network construction & maintenance section in Water Distribution Directorate in EWA, Bahrain since 2019.

Eng. Mr. Sayed Yousif Arif Mohammed



Eng. Mr. Sayed Yousif Arif Mohammed graduated from University of Bahrain with a B.Sc. Degree in Civil Engineering in 2016. He has also earned a M.Sc. Degree from University of Bahrain in the field of Structural Engineering in 2021. He has been working as an engineer in Maintenance Group of Water Distribution Directorate in Electricity and Water Authority, Bahrain since 2021

Eng. Mr. Mamdooh Hasan Mubarak



Eng. Mr. Mamdooh Hasan Mubarak has a B.Sc degree in Civil Engineering. He has supervised and coordinated the preparation of world class standards & specifications for traffic safety adapted to local conditions and high involvement with General Directorate of Traffic on the Fatal accident's investigation and their causes. He has been head of Traffic Safety at Traffic Engineering Section of Roads Planning and Design Directorate since 2012.

Eng. Mr. Mouaeth A. Al-Ameen



Eng. Mouaeth graduated from Civil Engineering Departments of Applied Science University, Jordan in 2008. He has also earned a M.Sc. Degree from University of Jordan in the field of Structural Engineering in 2021. He has experienced on structural design more than 10 years. Currently, He is Head of Structural Design Section (SDS), Construction Projects Directorate (CPD), Ministry of Works (MOW), Bahrain



Department of Chemical Engineering

Senior Design Projects of Chemical Engineering 1st Semester 2022-2023
Senior Project Coordinator: Dr. Abdulla Faisal Isa Alshater

Chemical Engineering Program

No	Student ID	Student Name	Project Title	Supervisor
1	20186409	Noor Khalil Dhaif	Verification study of the refining column in GPIC's methanol plant to examine the effect of high feed flow rates on the product quality and hydraulics of the existing column	Dr. Sabri Mrayed Dr. Mohamed Bin Shams
	20185167	Bushra AbdAli Al-Khalaf		
	20187692	Huda Abdulhadi		
2	20185465	Abdullah Fawzi Ayash	Computer Aided Design For Packed Distillation Column	Dr. Hosni Ezuber Dr. Sabri Mrayed
	20172352	Arwa Ali Fardan		
	20151917	Ahmed Shamsaldin Mohammed		
3	20162734	Abdulkarim Ahmed Kashfi	Enhancement of practical session outcomes by the modification of the distillation unit in UOB	Mr. Abdalnaser Abdulaziz Dr. Husny Alzubeir
	20164180	Ahmed Sameer Ahmed Neama		
	20167351	Zahwa Sobhi Desouky		
4	20180307	Lulwa Rabeea	Electrochemical Behavior of Heat-Treated Stainless Steel in Formation Water	Dr. Hosni Ezuber Dr. Abdulla Alshater
	20181787	Menatalla Sami		
	20187552	Maryam Mohsen		
5	20163128	Isa Wafeeq Alkhaja	Forecasting Image Processing Normalized from Cihal Method normalized DoS based on the SL-EPR technique for Sensitized S32205 DSS	Dr. Abdulla Alshater Dr. Hosni Ezuber
	20150410	Mahdi A. Rasool Albaqal		
	20173167	Mohammed A. Hassan Abdulla		
6	20164533	Ahmed Mohamed Al-Samahiji	Feasibility study of using Peltier elements for condensation from humid air	Dr. Ajaz Rashid Dr. Muhammad Rizwan
	20178702	Fatema Isa Salman		
	20180873	Mohamed Ebrahim Al-Hamaqi		
7	20183489	Saifulla Majid Yahia Alattar	Increasing Efficiency of BAPCO'S 4ACDU Vacuum Heater	Dr. Majeed Safar Dr. Muhammad Rizwan
	20188370	Faisal Abdulshaheed Isa Talaq		
	20180479	Moin A M Abdalkarim		
8	20183140	Ahmed Hammoud Almoosa	Modelling of Seawater Reverse Osmosis Desalination Process	Dr. Sabri Mrayed Dr. Kamal M. Sasi
	20187817	Anas Hamed Al- Daham		
	20181670	Hazem Salem Ibrahim		
9	20180210	Anas Abdulla Alansari	Model-Based Optimization of Specific Energy Consumption in RO processes	Dr. Kamal M. Sasi Dr. Sabri Mrayed
	20186843	Anas Belal Yousif		
	20182004	Muhammad Hussain Ali		
10	20183998	Mohamed Ali Hasan	Design of Waste-to-Energy Facility for Sustainable Management of Municipal Solid Waste	Dr. Muhammad Rizwan Dr. Majeed Safar
	20182478	Saud Mohamed Alsehli		
	20182489	Abdulrahman Khalid AlQattan		
11	20183281	Anfal Yusuf	Water Quality Index	Dr. Qais Bu Ali Dr. Zainab Ali
	20183805	Reem Anas		
	20185574	Maryam Mohamed		
12	20184974	Faisal Almansouri	Predicting Phosphorus Removal Using Neural Network From Sequencing Batch Reactor	Dr. Qais Bu Ali Dr. Bassam Dr. Zainab Ali
	20184100	Abdulrahman Alkobaisi		
	20183348	Yusuf Alali		
13	20180768	Abdulla Hamza Jaafar	An investigation of the Effect of the Extraction Process of the Active Ingredients From Natural Coagulants on Wastewater Treatment	Dr. Qais Bu Ali Dr. Zainab Ali
	20180481	Ahmed Mansoor Ahmed		
	20186144	Ali Majeed Abbas		
14	20185115	Fatema AbdulGhani Mohsen	A Study of the Azo Dye Degradation in Spinel Ferrites Nanoparticles Integrated Microreactor	Dr. Zainab Mohammed Dr. Hayat Abdulla
	20186065	Narmeen Sayed Ali		
	20187218	Abdullah Abdulsalam		
15	20183936	Ali AbdulRedha Isa	Modeling Residence Time Distribution in Nonideal Reactors	Dr. Shaker Haji Dr. Hayat Abdulla
	20182171	Yasser Mohammed		
	20185384	Hussain Kamel		



Best Projects of Chemical Engineering Program, 1st semester, 2022-2023

The 1st Place:

No	Student ID	Student Name	Project Title	Supervisor
1	20183489	Saifulla Majid Yahia Alattar	Optimizing Thermal Efficiency of an Industrial Vacuum Heater	Dr. Majeed Safar Dr. Muhammad Rizwan
	20188370	Faisal Abdulshaheed Isa Talaq		
	20180479	Moin A M Abdalkarim		

The 2nd Place:

No	Student ID	Student Name	Project Title	Supervisor
2	20183281	Anfal Yusuf Abdulla	Water Quality Index	Dr. Qais Bu Ali Dr. Zainab Ali
	20183805	Reem Anas Buhendi		
	20185574	Maryam Mohamed Alqahtani		

Process Instrumentation and Control Engineering

No	Student ID	Student Name	Project Title	Supervisor
1	20185577	Wadeeah Abdulameer Hasan	Control of debutanizer in dynamic Hysys simulation using DMC	Dr. Bassam Alhammad
	20170456	Zainab Mohammed Albaharinah		
	20189173	Flevia Dilshani		
2	20174806	Batool Sayed Jawad	Upgrading the dry-dock system of asry company with PLC	Dr. Raed Aljowder Mrs. Bintu Jasson
	20175781	Fatima Yaser Marhoon		
	20196152	Fatima Mohamed Helal		
3	20162170	Hassan Mohammed Abd Aziz	RO fouling mitigation and cleaning using DCS by frequency disturbance with modify pipe geometry	Dr. Mostefa Ghassoul
	20184635	Mansoor Abdulghani Mansoor Ali		
	20164709	Hussain Saeed Ebrahim Alkhal		
4	20184653	Ali saeed	Multivariable process control with a DCS interface to Simulink through an OPC	Dr. Mostafa Ghasool Dr. Mohamed Bin Shams
	20180984	Ali hassan		
	20186510	Ali marhoon		
5	20186171	Bayan Abdulrahman Ghareeb	Tennessee Eastman dataset for fault-detection and Decision Support Systems	Dr. Raed Aljowder
	20176314	Salem Hasan Salem		
	20183804	Maha Khalid Alsendi		
6	20163262	Jenan A.hadi Alhamad	Data Clustering and Fault Detection of Tennessee Eastman process	Dr. Raed Aljowder
	20174062	Asma Hasan Ali Balash		
	20154656	Masooma Mohamed Baqer		
7	20182537	Mohamed Hamza Hasan	Dynamic Modelling & Control Of Tubular Reactor System Using Various Advance Techniques	Dr. Mohamed Bin Shams
	20187244	Saud Abdulla Khalifa Aldoseri		
	20188082	Saleh Mohammed Mohammed		
8	20176721	Hawra Shaker	Design of two access controller to maximize energy extraction in four solar panels using LTFs to position the panel with panel cooling system	Dr. Mostefa Ghassoul
	20173433	Mohammed Sami		
	20172300	Ali Abdulnabi		
9	20173136	Mahdi Ebrahim Kadhem	Designing an online an online system using peak detection to localize the underground leak with the aid of hydrophones	Dr. Mostefa Ghassoul
	20180609	Fadhel Abbas Abdulnabi		
	20186097	Ali Mohamed Najeeb		
10	20186346	Qasim Husain Ali	Implementation of closed loop PID controller for Arduino based autonomous vehicle	Dr. Raed Aljowder Mrs. Bintu Jasson
	20184630	Ahmed Adel Aljerdabi		
	20172597	Ahmed Jaafar Mohsen		



Best Projects of Process Instrumentation and Control Engineering Program, 1st Semester, 2022-2023

The 1st place

No	Student ID	Student Name	Project Title	Supervisor
1	20182537	Mohamed Hamza Hasan	Dynamic Modelling & Control Of Tubular Reactor System Using Various Advance Techniques	Dr. Mohamed Bin Shams Dr. Shaker Haji
	20187244	Saud Abdulla Khalifa Aldoseri		
	20188082	Saleh Mohammed Mohammed		

The 2nd Place:

No	Student ID	Student Name	Project Title	Supervisor
2	20185577	Wadeeah Abdulameer Hasan	Control of debutanizer in dynamic Hysys simulation using DMC	Dr. Bassam Alhammad
	20170456	Zainab Mohammed Albaharinah		
	20189173	Flevia Dilshani		

External examiners:

Dr. Khalid Ahmed Burashid



Dr. K. Burashid, is an ex. Vice Chief Executive for Planning & Projects, Electricity and Water Authority in Bahrain, and technical adviser for the UNDP for the establishment of the Sustainable Energy Unit and the drafting of Bahrain's Energy Efficiency and Renewable Energy National Plans. Received his PhD in Engineering in 1995. Chartered Engineer and Fellow member of the Institution of Chemical Engineers (UK). Represented the Electricity & Authority in various regional and International events related to Electricity, Water and Renewable Energy. He devoted more than 30 years advancing the understanding and troubleshooting of desalination processes with special interest in Energy in Thermal and Membrane technologies, Authored several papers in the field of Desalination operation & process optimization. He is also the Author of the book "Renewable Energy in Bahrain and the GCC states".

Eng. Mr. Husam Fowzi Harb



Husam Fowzi Harb is an Automation Engineer in Tatweer Petroleum. He graduated from University of Bahrain on January 2021 with First Class Honour Bachelor's degree in Process Instrumentation and Control Engineering. His interest and experience is in the area of Advance Process Control, Fire and Gas Systems, Wireless Instrumentation, and Data Analytics. Also, certified in AWS Data Analytics Speciality.

Eng. Mr. Abdulla Daraj



Abdulla Daraj is an Automation Engineer at Tatweer Petroleum. Abdulla specialises in Control Systems (SCADA), Data Historian and Alarm Management. Abdulla graduated with a Bachelors degree in Electrical and Electronic Engineering from Newcastle University and a Masters in Management from the University of Edinburgh. His areas of interest include Industry 4.0, Business Intelligence and Machine Learning.

Eng. Mr. Muhammad Aamir



“General Manager QA & Technical” with 20 years of experience in the feild of Textile Wet Processing and Fabrication leading multiple roles in production Processes & Quality such as Pretreatment/Bleaching, Printing Dyeing, Finishing, Quality Control and Quality Assurance, technical Lab, Effluent Treatment Plant & implemented lean methodology in operations.

Eng. Mr. Abdulla Ali Juma Al Shamlan



Abdulla is Superintendent of the Reliability Support Section - Reliability Maintenance Department (RMD) - in Bahrain Petroleum Company (BAPCO) with more than 20 years of total experience in engineering, inspection, corrosion, and fixed equipment integrity in the petroleum refinery .Abdulla graduated from Bahrain University with a BSc in Mechanical Engineering (2001) and has MSc in Corrosion Control Engineering (2007) from the University of Manchester, UK. In professional certifications, he is a Certified Pressure Vessel Inspector (API 510), a Certified Piping Inspector (API 570), a Qualified Welding Inspector (AWS QC1) , a Certified Corrosion & Materials professional (API 571) and Certified Risk Based Inspection Professional (API 580). His main responsibilities are conducting or supervising investigations into material failures and corrosion related problems which lead to corrective actions or proactive alternative solutions.

Eng. Sayed Abdulla Al Meshal



Sayed Abdulla is a Senior Process Engineer in the Technical Services Department at Bapco. He has over 7 years of experience in hydrotreating, catalytic reforming, and catalytic cracking (FCC) processes providing technical support aiming to improve the operation and maximise profits. He also worked for Chevron Lummus Global (CLG) for three months as a Process Engineer working on the process engineering design of the hydrocracking unit. S. Abdulla is one of the co-founders of BChemE and has been an active member of the organising committees of several conferences in the GCC. In 2015, his environmental research on the wastewater treatment using novel microreactors got recognised by APJ Abdulkalam, the former President of India. S. Abdulla holds a Master of Science in Chemical Engineering with Distinction, and a Bachelor of Science in Chemical Engineering, Distinction with Second Class Honors, from University of Bahrain.

Dr. Ali Ridha Alroomi



Ali R. Al-Roomi earned his B.Sc. degree in Process Instrumentation and Control Engineering and his M.Sc. degree (Hons.) in Electrical and Electronics Engineering from the University of Bahrain, Sakheer, Bahrain, in 2006 and 2014, respectively. He earned his Ph.D. degree (Hons.) in Electrical and Computer Engineering from Dalhousie University, Halifax, Nova Scotia, Canada, in 2020. For four years, he worked as a research assistant with Professor Mohamed E. El-Hawary for many projects funded by the Natural Sciences and Engineering Research Council (NSERC) of Canada. He has more than 10 years of experience in optimization field and more than 7 years of experience in automation companies and electric power systems. He has been awarded two scholar ships by the Faculty of Graduate Studies (FGS) and Bruce and Dorothy Rosetti Engineering Research Scholarship. His research interests include machine learning systems, meta-heuristic optimization algorithms, hybrid computing systems, power systems (operation, protection, state estimation, smart grid, design and analysis, system realization), regression and forecasting, process instruments and analytical sensors, control systems, and some interdisciplinary engineering fields. He is a member of IEEE and his personal website is www.al-roomi.org.

Eng. Mr. Anant Shrotre



Anant Shrotre is a Chemical Engineer from Institute of Chemical Technology Mumbai, India. In last 41 Years of work experience, Anant was involved in Grass root projects in Plastic, Fertilizer, Basic Chemicals & Petrochemical Industries. Since 1997 till today Anant has contributed in Erection, Commissioning and Operations of Urea Plant in GPIC, Sitra, Bahrain.

Department of Electrical and Electronics Engineering

Senior Design Projects of Department of Electrical and Electronics Engineering
1st Semester 2022-2023

Senior Project Coordinator: Dr. Ayman Al-Khazraji

Electrical Engineering Program Senior Projects

No	Student ID	Student Name	Project Title	Supervisor
1	20172341	Sayed Ahmed Mohamed Hashem Almoosawi	Low-Cost Increased Efficiency Pv-Based Energy Generation	Dr. Zuhair Bahri
	20173369	Jasim Mohamed Mahdi Khamis		
	20177937	Sayed Ahmed Hadi Naser Yusuf		
2	20175222	Fatema Sayed Husain Jaafar Husain	Control Of Vertical Axis Wind Turbine	Dr. Ebrahim Abdulrahman Dr. Maamar Taleb
	20185791	Heba Isa Salman Salman		
3	20182235	Mohamed Ali Hasan Alafoo	Design And Implementation Of A Virtual Protection Lab	Dr. Fadhel Albasri
	20182790	Osama Hassan A. Rasool Alalaiwat		
	20183008	Abbas Fadhel Abbas Alaraibi		
4	20184298	Sayed Hameed Mahmood Baqer Alkamel	Solar Panel Cleanning System	Dr. Ayman AlKhazraji
	20182530	Husain Ali Mohamed Ali Hamad		
	20184537	Sayed Ali Amin Alawi Alawi		
5	20173280	Ahmed Amir Saad Mohamed	Smart Metering	Dr. Ayman AlKhazraji
	20177204	Mahmood Abdulrasool Jaafar Ahmed		
	20151758	Nadeen Majduddin Rashad Khalil		
6	20170172	Hassan Mahmoud Hassan Elkwifi	Design Of Parallel Parking Car	Dr. Salwa Baserrah
	20181994	Sara Husain Ali Alabdulrasool		
	20180356	Rehab Mansoor Abdulla Hasan		
7	20183132	Mohamed Jaafar Merza Salman	Smart Irrigation System (Solar Powered)	Dr. Raja Mohamed
	20184666	Husain Mohamed Saleh M. Hakeem Alarab		
	20182122	Irshad Ahmad A. Khan Mohammad Sharif		
8	20180812	Ali Zubair Aslam	P&O Algorithm Based Mppt For Dc-Dc Converter	Dr. Mohamad Amine Fnaiech
	20181111	Zainab Abdulla Jaafar Alghanem		
	20182033	Nada Husain Ali Salman		
9	20183738	Mufeed Abdulhusain Ahmed Alakri	Frequency Variable Control Of Induction Motor Using Discontinuous Pwm Based Inverter	Dr. S. Ali Almosawi
	20185441	Husain Abdulshaheed Abdulla Mohamed		
	20186799	Ali Hussain Abdulla Alhalwachi		
10	20174637	Ali Mohamed Habib Almoathen	Voltage Variable Control Of Induction Motor Using Continuous And Dicontinuous Pwm Based Inverter	Dr. S. Ali Almosawi
	20180986	Hasan Hussain Ahmed Dawood		
	20183258	Osama Hussain Altaweel		

Best Projects of Electrical Engineering Program, 1st Semester, 2022-2023

The 1st Place:

No	Student ID	Student Name	Project Title	Supervisor
1	20182235	Mohamed Ali Hasan Alafoo	Design and implementation of a virtual protection lab	Dr. Fadhel AlBasri
	20182790	Osama Hassan A.Rasool Alalawat		
	20183008	Abbas Fadhel Abbas Alaraibi		

The 2nd Places:

No	Student ID	Student Name	Project Title	Supervisor
2	20175222	Fatema Sayed Husain Jaafar	Control of vertical axis wind turbine	Dr. Ebrahim A.Rahman Dr. Maamar Taleb
	20185791	Heba Isa Salman Salman		

Electronics Engineering Program Senior Projects

No	Student ID	Student Name	Project Title	Supervisor
1	20180400	Abdulrahman Mohammed Alsayed	Robotic Hand With Wireless Controller Glove	Dr. Ayman AlKhazraji
	20184264	Mahmood Salman Taqi Salman		
	20184964	Abdulla Ahmed Khalid Alomari		
2	20165298	Bayan Habib Abdulla Fardan	Improved Electroencephalography Classification Using Ensemble Learning - Alzheimer's Depression	Prof. Ebrahim Mattar
	20176374	Hawra Khaled A.Hameed Alrahma		
	20185645	Zainab Ebrahim Kadhem Ahmed		
3	20184132	Redha Bahram Qassim Arayeshy	Machine Learning Based Vehicle Auto Cruise Control	Prof. Ebrahim Mattar
	20185350	Mohamed Ahmed Mansoor Madan		
	20185946	Jaffar Mohamed Hasan Sh.Abdulla		
4	20172766	Murtadha Ahmed Mohsen Alasfoor	Smart Iot Based Greenhouse System	Prof. Mohab Manjoud
	20173882	Husain Ismaeel Mahdi Dawood		
	20175172	Ali Hasan Ahmed Abdulla Khamis		
5	20172570	Jaafar Mohamed Hasan Jaafar	Estimation Of Human Gait Mechanics Based On Imu Data And MI	Dr. Sarah Alshareeda
	20197538	Haider Abbas Ateya Abdulrasool		
	20195449	Mohamed Raed Aburawais		
6	20167770	Ruqaya Jaafar Abdalnabi Alasfoor	Design And Implementation Of Artificial Face	Dr. Mohammed Alkhalidy
	20161668	Mahmoud Zafer Aloush		
7	20185121	Sami Isa Abdulhusain Ahmed	Computer Vision Based Safety Alarm System	Dr.Ayman Alkhazraji
8	20184337	Almaha Hamad Alammari	Design Of A Beach Cleaning Robot	Dr. Salwa Baserrah
	20186986	Rama Mohamed Hashem Alkaraki		
	20180464	Fatima Abdulla A.Aziz Alkaabi		
9	20183011	Husain Abdulla Ebrahim Butarada	Smart Robotic Nurse	Dr. Salwa Baserrah
	20185542	Abdulla A.Husain Hasan Aldaghas		
	20186406	Ahmed Saleh Ahmed Alshowaikh		



Best Projects of Electronics Engineering Program, 1st Semester, 2022-2023

The 1st Place:

No	Student ID	Student Name	Project Title	Supervisor
1	20184337	Almaha Hamad Mohamed Alammari	Design of a Beach Cleaning Robot	Dr. Salwa Baserrah
	20186986	Rama Mohamed Hashem Alkaraki		
	20180464	Fatima Abdulla A.Aziz Alkaabi		

The 2nd Place:

No	Student ID	Student Name	Project Title	Supervisor
2	20180400	Abdulrahman Mohammed Alsayed Abdumuneim	Robotic hand with wireless controller glove	Dr. Ayman AlKhazraji
	20184264	Mahmood Salman Taqi Salman		
	20184964	Abdulla Ahmed Khalid Alomari		

Examiners

Prof. Isa S. Qamber



Prof. Isa S. Qamber received the B.Sc. degree in electrical engineering from King Saud University - Saudi Arabia, in 1982, M.Sc. Electrical Power Systems Analysis degree in 1984 from UMIST, United Kingdom, and the Ph.D. degree in reliability engineering from the University of Bradford, UK in 1988. He was an X-chairman from February 1996 until April 2000 for Department of Electrical and Electronics Engineering (University of Bahrain). For the period 2008-2011 was the dean of College of Applied Studies. For the period 2011-2014 was the dean of Scientific Research. Currently, he is Professor in the Electrical and Electronics Engineering Department (University of Bahrain). He published more than hundred articles in the international journals and conferences. He published two textbooks and five book chapters. He is the founder of IEEE Bahrain Section in 2001. He is a referee for International and National Journals and Conferences. He is Editor in International Journals.

Ms. Shatha Alweseasi



Ms. Shatha Alweswasi is a Core Network Manager in Mobile Intelligent network at Batelco Bahrain. She received her Associate Diploma of Electronic in 1993 and Bachelor of Science (BSc) in Electrical Engineering in 1996 from University of Bahrain. She has joint Batelco since June 1996. She has more than 20 years of industrial experience in land lines telephony and mobile GSM network. Her main duties are as following:

1. Developing, planning and managing all types of network small & medium scale projects ensuring alignment with the international standards, the Network & IT policy and the overall corporate strategy and objectives.
2. Controlling the activities of the Operation, Maintenance, and Installation & Evaluation tasks within each project, ensuring that these are performed to the required standards and according to the network policies & procedures to maintain maximum and continuous service availability.
3. Assist in the acceptance of new systems, the expansion of the existing services and evaluation of new equipment and systems.
4. Install and commission new equipment and perform hardware and software upgrades ensuring minimum impact on services.

Her main hobbies are volunteering work which aim to help and inspire the societies and travelling.

Eng. Mohamed Jasim Al Mehaiza



Eng. Mohamed Jasim Al Mehaiza, Senior Telecommunication Engineer, Ministry of Transportation and Telecommunications.

He is a Senior Telecommunication Engineer working under the Ministry of Transportation and Telecommunications.

He graduated from the University of Bahrain with a bachelor's degree in Electronics Engineering in 2012. He also worked as Electronics Engineer in Bahrain Defence Force and Electricity and Water Authority.

Mohammed gained several self-paced advanced certificates and experience in hardware implementation based on PLCs, Android, and Raspberry Pi along with programming skills focused on python, C++, Java languages, and others. He established a training center along with his team to raise awareness among children, juniors, youth, and the public about the importance of innovation. He implemented various prototypes in the field of Robotics, AI, Automation, IoT, drones, wireless communication, and others.

Department of Mechanical Engineering

Senior Design Projects of Mechanical Engineering 1st semester, 2022-2023 Senior Project Coordinator: Dr. Said Ghani Khan Fateh Rahman

No	Student ID	Student Name	Project Title	Supervisor
1	20182303	Husain Hasan Abbas Zainal	Design of Wire Arc Additive Manufacture Machine	Prof. Ghulam Hussaim
	20182701	Qasim Ebrahim Ahmed		
	20185418	Ali Abdulredha Ahmed Saeed		
2	20167908	Othman Khalid Ali Albinkalil	Water Distillation by Solar Energy	Dr. Abdul Waheed Badar
	20180555	Adnan Mohamed Bualqasimi		
	20183353	Ahmed Ossama Fatahalla		
3	20165137	Osama Ali Mohamed Hasan	New Design of Multi-Function Desert Car Wiper	Dr Zahir Hanouf
	20184272	Shaima Jameel Fardan Shuaib		
4	20185447	Qassim Abdunabi Abdulla Ali	Passive Control Using Negative Stiffness Vibration Isolator Device for A Pole Camera Mount	Dr. Mohamed Al-Qassab
	20186631	Mahmood Saleh Isa Al Taraif		
	20186667	Mohamed Nader Ali Mohamed		
5	20151886	Saifuddin Mahmood Alsagheer	Dancing Wind Turbine	Dr. Riaz Muhammad
	20158446	Ahmad Issa Alhasan		
	20186498	Saifeddin Khaled Albadawi		
	20163303	Hasan Ali Akbar Mustafa		
6	20181168	Ali Mohamed Jasim Althawadi	PVC Electric Bike	Dr. Maher Mahmood
	20183313	Ali Raji Ali Alhammad		
	20184257	Turki Ahmed Al Mahmood		
7	20183126	Ali Hameed Ali Mubarak	Cnc Drawing Table	Dr. Maher Mahmood
	20191280	Ali Jawad Yaqoob Marzooq		
	20180241	Sayed Ali Jaafar Husain Naser		

Best Projects of Mechanical Engineering Program, 1st Semester, 2022-2023

The 1st Place:

No	Student ID	Student Name	Project Title	Supervisor
1	20185447	Qassim Abdulnabi Abdulla Ali	Passive Control Using Negative Stiffness Vibration Isolator Device For A Pole Camera Mount	Mohamed Al- Qassab
	20186631	Mahmood Saleh Isa Al Taraif		
	20186667	Mohamed Nader Ali Mohamed		

The 2nd Place:

No	Student ID	Student Name	Project Title	Supervisor
2	20181168	Ali Mohamed Jasim Althawadi	PVC Electric Bike	Dr. Maher Mahmood
	20183313	Ali Raji Ali Alhammad		
	20184257	Turki Ahmed Al Mahmood		

External examiners

Engr. Iftikhar Ahmad



Engr. Iftikhar Ahmad is a Lecturer in Mechanical Engineering at Bahrain Polytechnic, Kingdom of Bahrain. He completed his bachelor's and Master's degrees in Mechatronics Engineering from the University of Engineering and Technology, Peshawar, Pakistan in 2015 and 2017, respectively. Currently, he is also a Ph.D. Scholar in Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia. His field of interest comprises Energy Harvesting from Vibration, Acoustics, and Fluid Flow for IoT Sensors, Performance Enhancement of Photovoltaic modules, and Condition & Structural Health Monitoring. Iftikhar has authored and co-authored more than 25 international journals, conference publications, and a couple of book chapters.

Engr. Ali Mohamed Alhaddad



Engr. Ali Mohamed Alhaddad is a field Operations engineer at Al-Dur power and water Plant. He has experience in simple and Combined Cycles power plants, reverse osmosis (RO) and CO₂ production plan. He did his BSc Mechanical Engineering from University of Bahrain in 2015.



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