



2015\2016



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Dean's Word

The Last year, the College of Engineering gave great attention to the development of academic work and scientific research and to the advancement of the college of Engineering to leapfrog certain qualitative leaps in many areas.

Since proper planning is the basis for improving academic and administrative work, the College of Engineering has developed its strategic plan and operational plan at the level of initiatives to suit and comply with the University's strategic plan

The College of Engineering considered the development of the academic and administrative staff as one of its top priorities. Therefore, the College has established many workshops and lectures in various fields such as academic guidance, quality and e-learning, which included the members of the faculty and the students alike.

The Faculty of Engineering has provided an academic environment that encourages its employees to excel and initiative in work and implementation. This contributed to the College of Engineering obtaining many awards in scientific research, quality and e-education at the university level national levels. The most important of these is the college's first patent in mechanical engineering From the King Abdulaziz City for Science and Technology.

Our students have the our greatest attention to developing their skills by organizing specialized training courses for them and holding various workshops in e-learning, academic guidance and the choice of specializations. Our students competed in engineering inventions and won the first three positions at the university level. The fifth annual conference of scientific research for the students of the College of Engineering is a good example of linking engineering sciences with the practical implementation and development of students' skills in this area.

As the College of Engineering seeks to obtain the ABET academic accreditation for its three academic programs, a large part of the quality work has been based on the preparing of academic programs for academic accreditation through the intensification of work and the holding of workshops and lectures in the methods of measurement and evaluation of learning outcomes and writing self-study reports. Most of SSRs already written and will be submitted soon to the International Academic Accreditation Panel ABET.

The improvement of the quality level of education and the increase in the number of students' acceptance is one of the priorities at the university level and at the national level (Afaq plan). A future operational plan was developed to improve the admission requirements after the preparatory year to accommodate the increasing number of students wishing to study engineering disciplines while maintaining a level of education capable of To complete the requirements of study plans, excellence and creativity.



Dr. Abdullah Alabulkarim
Dean of College of Engineering

College Profile

Vision

To be internationally well-recognized engineering college in top engineering education, scientific research, and service to the community

Mission

To provide and educate students with the highest quality in engineering knowledge and to facilitate cutting-edge research for the benefit of the society

Objectives

To attract high-quality faculty and well-prepared students.

To continuously improve and revise the academic programs.

To build a strategic alliance with the industry.

To be sensitive to the needs of the society

The origin of the College

The College of Engineering was established in 1430 AH. Since its inception, the College has consisted of three main departments: the Electrical Engineering Department, the Mechanical Engineering Department, the Civil Engineering Department, and the Computer Engineering Department, which was later transferred to the College of Computer Science within the restructuring of the academic departments in 1433 in accordance with Supreme Decree No. 7385 dated 26/2 \ 1434 and the decision of the General Secretariat of the Council of Higher Education No. 15 \ 71 \ 1433 on 14 \ 11 \ 1433. The new structure included the re-naming of academic departments as follows

1- Department of Mechanical and Industrial Engineering

2- Department of Civil and Environmental Engineering

3- Department of Electrical Engineering

Within the same decision, three departments were established:

1- Department of Basic Engineering Science (Supporting department)

2- Department of Architecture and Interior Design

3. Department of Systems Engineering and Mechatronics



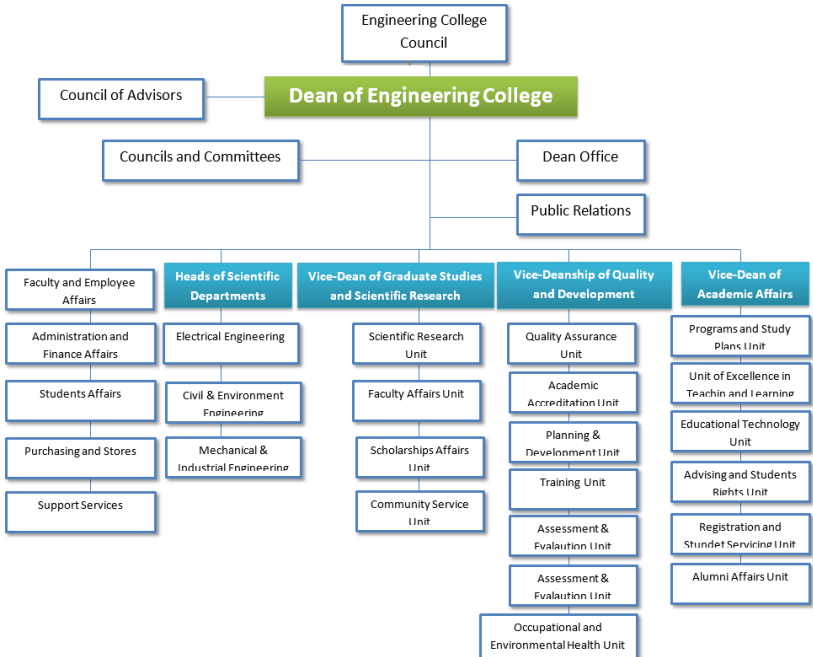


Figure 1: Organizational Structure of the College of Engineering

College of Engineering: Departments, programs and laboratories

The College of Engineering contains three departments that have been addressed. The Department of Electrical Engineering, the Department of Civil and Environmental Engineering and the Department of Mechanical and Industrial Engineering

Each department has three academic tracks that qualify the student to obtain a bachelor's degree in minor specialization after passing 136 credit hours in addition to the need to pass the student engineering practice in accordance with the conditions and requirements of the college

The Admission requirements in academic programs are standardized and the most important of them:

- Passing the preparatory year for scientific and engineering colleges according to the approved university admission requirements and that applying by the Deanship of Admission and Registration
- Passing 136 credit hours
- Passing Engineering Practice requirements

The following is a summary of each departments and the most important statistics and activities during the year 15/16:

Electrical Engineering Department:

Vision

To become internationally recognized for graduating electrical engineers proficient in putting theory into practice and capable of succeeding in advanced research and studies for the benefit of the society.

Mission

To provide graduates with distinguished engineering knowledge, professional and engineering problem-solving skills and be engaged in research and experiential work for the benefit of community

Program Objectives

The Electrical Engineering Program prepares graduates to be:

- 1- Professionals in electrical engineering having developed superior technical competence and be actively engaged in lifelong learning
- 2- Successful researchers, entrepreneurs, experts and educators practicing high ethical and professional standards for the benefit of the community.

Specialized tracks in the department:

There is one program under the title of "Electrical Engineering Program". The program has three scientific tracks:

- 1- Powers and machines
2. Communications and Electronics
3. Control and systems

Power and machines and the communication and electronics tracks are the activities within the Department. The third track will be activated in the future to meet the requirements of the labor market and the availability of faculty members in the departments.

The number of students in the Department of Electrical Engineering at various levels of study until the end of the second semester of the academic year 15/16 128 students, including 128 Saudi students and 0 students from non-Saudis. The number of graduates for the same academic year was 12 graduates for the track of the Power and Machines. Table (I) shows the distribution of students and academic tracks in the Department of Electrical Engineering:

Program	Tracks	No of Registered Students
Electrical Engineering	Electrical Engineering	76
	Communications and Electronics Engineering	0
	Power and Machines Engineering	90
Total		166

Table (I): Distribution of students enrolled in academic disciplines in the academic year 15 \ 16

The Department of Electrical Engineering has 11 modern laboratories that provide the educational process with applied concepts and improve student skills. Table (2) shows the names of the laboratories in the department:

Number	Lab Name
1	Electric Power and Machine
2	Protection & High Voltage
3	Electric Circuits
4	Communications Principles Lab Antennas and wave propagation Lab
5	Electronic workshop
6	Principles of Electric Power & Machines
7	Basic of Electronic Devices and Circuits
8	Measurements & Control
9	Analog and Digital Electronic Circuits
10	Microwave Lab
11	Communication and signal processing

Table (2): Laboratories in the Department of Electrical Engineering

The number of new students in the Department of Electrical Engineering on the first semester is 20 students, including two students of non-Saudi nationality and the number of withdrawn is two students. In the second semester, 10 new students were enrolled in the Electrical Engineering Program

Mechanical and Industrial Engineering Department:

Vision

To be recognized by the local and international communities as an excellent mechanical engineering program

Mission

The mission of Mechanical engineering department is to provide the community with mechanical engineers who are equipped with rigor of engineering education necessary for life-long professional practices and research activities

Educational objectives

The Mechanical Engineering Program at Majmaah University prepares students to have strong foundation in mathematical, scientific and engineering sciences that are able to:

- 1- Prepare graduates with the engineering and technological skills to pursue their professional career in Mechanical Engineering with ethical attitude.
- 2- Provide graduates self- reliance and sustainable capabilities to fulfill the engineering and research needs of the community.

Specialized tracks in the department:

There is one program under the title of "Mechanical Engineering Program". The program has three scientific tracks:

1. Mechanical Power engineering.
2. Industrial engineering.
3. Design and production engineering.

The track of mechanical power engineering is the active track within the department. The number of students in the Department of Mechanical and Industrial Engineering until the end of the second semester of the academic year 15/16 is 58 students. The number of graduates for the same academic year was 8 graduates. Table (3) shows the distribution of students and academic tracks in the Department of Mechanical and Industrial Engineering:

Program	Track	No of Registered Students
Mechanical and Industrial	Mechanical Engineering	47
	Mechanical Power Engineering	13
	Industrial Engineering	8
Total		68

Table (3): Distribution of students enrolled in scientific tracks in the academic year 15/16

In the Department of Mechanical and Industrial Engineering, there are 16 laboratories that provide the educational process with applied concepts and improve student skills. Table (4) shows the names of the laboratories in the department:

Number	Laboratories Name
1	Mechanical Design
2	Thermodynamics
3	Manufacturing
4	Process Workshop
5	Mechanical Vibration
6	Engineering Material
7	Metallurgy
8	Advanced Manufacturing Systems
9	Fluid Mechanics
10	Heat Transfer
11	Air Conditioning and Refrigeration
12	Mechanical Measurement
13	System Dynamics

14	Environmental Measurement
15	Mechanical Design
16	Thermodynamics

Table (4): Laboratories in the Department of Mechanical and Industrial Engineering

The number of new students in the Department of Mechanical and Industrial Engineering on the first semester is zero students. In the second semester, the number of new students reached also zero, which shows a problem in the number of accepted students who have a desire to study this specialization.

Department of Civil and Environmental Engineering

Vision

To develop prominent educational and research programs that benefit the economic development of the region and the nation

Mission

To provide excellent engineering education that is conducive to talent and creativity and based on scientific knowledge, state of the art research, and expertise to serve the community in a professional and ethical manner

Educational Objectives

The Graduates of the Civil Engineering program at Majmaah University will:

- 1- have a successful career in the civil engineering profession as practicing engineers and consultants in diverse areas that include structural, geotechnical, transportation, water resources and environmental engineering; or other related emerging fields.
- 2- demonstrate leadership and managerial skills through seeking professional licensure, and identifying and solving emerging issues of community, country and at global level.
- 3- be committed to have life-long learning and professional development in pursuing higher studies and state of the art research to identify and solve real-life civil engineering problems.
- 4- gain high-quality engineering expertise and maintain a keen awareness of ethical, social, environmental, and global engineering challenges.

Specialized tracks in the department:

There is one program under the title "Civil Engineering Program". The program has three scientific tracks:

- 1- Structural Engineering
- 2- Surveying Engineering
- 3- Water and Environmental Engineering

The number of students in the Department of Civil and Environmental Engineering until the end of the second semester of the academic year 15/16 is 222 students. The number of graduates for the same academic year was 16. The following table shows the distribution of students and academic tracks in the Department of Civil and Environmental Engineering. The active track in the department is "Construction Engineering"

Program	Track	No of Registered Students
Civil & Environmental	Water and Environmental Engineering	87
	Structural Engineering	61
	Surveying Engineering	15
Total		163

Table (5): Distribution of students enrolled in academic disciplines in the academic year 15 \ 16

The Department of Civil and Environmental Engineering has 9 modern labs that provide practical training in applied concepts and improve student skills. Table (6) shows the names of the plants in the section:

Number	Labs Name
1	Environmental Engineering
2	Roads and Asphalt
3	Area
4	Construction Engineering
5	Soil Mechanics and Foundations
6	Geographic Information Systems
7	Hydraulics
8	Water Resources
9	Concrete

Table (6): Laboratories in the Department of Civil and Environmental Engineering

Department of basic engineering sciences:

Mission

Our aim is to provide moderate courses in various fields of basic sciences (mathematics, physics, chemistry) for the students of the College of Engineering, also take care with scientific and creative skills of the students.

Vision

To become nationally and locally recognized in basic engineering science education, scientific research and community services.

Objectives & Goals

- 1- To provide an education based on scientific principles and engineering practice, that forms the foundation for leadership in career vital to society
- 2- Strengthening students' skills and talents to become successful engineer.

- 3- Built a strong foundation and knowledge in engineering fundamentals with a capacity to know how, when and where to use the knowledge in specific way.
- 4- Built strong oral and written communication skills with a capacity to produce effective technical documents and use current communication techniques and tools.
- 5- Develop the ability to use the technical skills and modern engineering tools necessary for engineering application.

The number of students in the Department of Basic Engineering Sciences until the end of the second semester of the academic year 15/16 is 100 students. There are no graduates because it is a supporting department that does not award a degree. There is one laboratory in the

The total number of labs in the College of Engineering is 41 labs as shown in the diagram (1), which shows the distribution of labs to academic departments

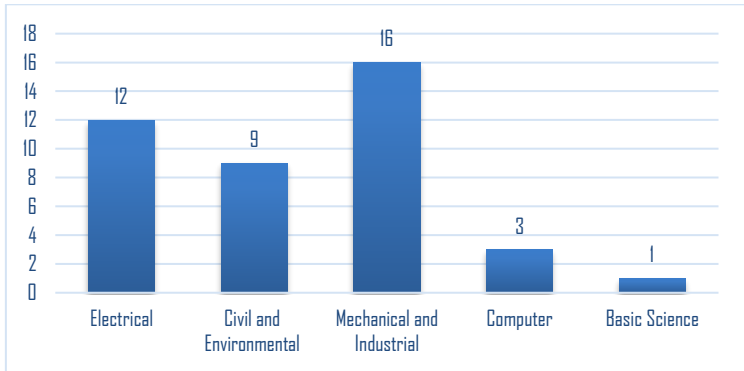


Diagram (1): The number of laboratories distributed among academic departments

Students

Students Statistical Data

Academic Department	New	Reg	Grad	Total
Electrical engineering	5	233	31	269
Civil and Environmental Engineering	6	235	35	276
Mechanical and Industrial Engineering	1	98	11	110
Department of Basic Engineering Sciences**	0	37	--	37
Total	12	603	77	692

Table (7) Number of enrolled students, graduates and new registered in the college distributed according to academic departments 2015\2016

** The College has the Department of Basic Engineering Sciences, which is a supporting department and does not award a bachelor's degree

The number of students enrolled in the College of Engineering for the academic year 15/16 603 students distributed over four Academic departments . Number of students graduated for the same year 77 graduates. The increase in the number of enrolled students compared to the academic year 14 \ 15 is about 22.2% and the number of graduates increased by 4.6%

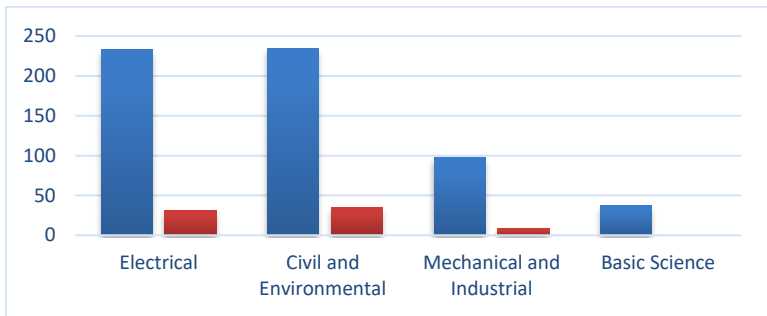


Figure (2) shows the relationship between the number of enrolled students and the number of students graduating for the academic year 15/16

Detailed statistical data showing the development of the number of students

The number of students enrolled in the College of Engineering by the end of the academic year 15/16 was 692 students as shown in Table (8).

Departemnt	Registered	Nationality		Saudi/Reg Ratio (%)
		Non-Saudi	Saudi	
Bachelor				
Electrical engineering	233	7	226	97
Civil and Environmental Engineering	235	15	220	93.6
Mechanical and Industrial Engineering	98	3	95	97
Basic Engineering Sciences	37	2	35	94.6
Total	603	27	576	95.5

Table (8) No of students enrolled in the college distributed according to nationality and departments 15 \ 16

Table (8) shows that the percentage of Saudis in the College of Engineering exceeds 95%, which shows the importance of the college in particular and the university in general in providing education to the areas surrounding the university, especially in the city of Majmaah and Hawtha Sudair, Ghat and Zulfi. When compared with the 15/15 school year, we see a convergence in this ratio.

As shown in Table 8 and Figure 3, the demand for electrical, civil engineering and environmental engineering is higher than that of mechanical engineering according to the expectations of the college and students for the needs of the labor market

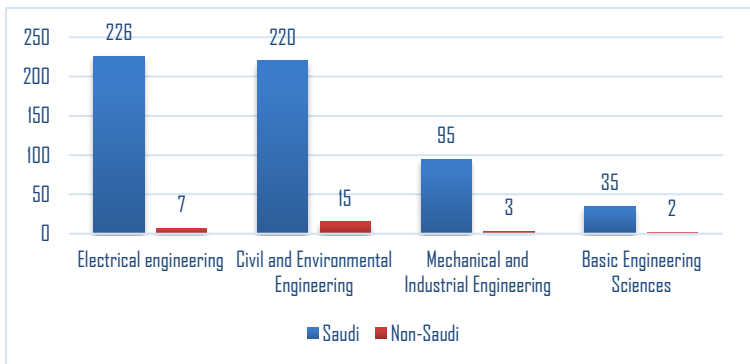


Diagram (3) Distribution of Saudi and non-Saudi students to academic departments

However, if we look at these figures as a percentage, we find that the percentage of withdrawal in the college did not exceed 2.1%, whereas the percentage in the academic year 14/15 is 3.77, ie a decrease of 1.67%

Evolution of the number of students in the College of Engineering

Department	11\12	12\13	13\14	14\15	15\16
Electrical engineering	144	190	210	211	269
Civil and Environmental Engineering	113	156	198	220	276
Mechanical and Industrial Engineering	33	53	76	86	110
Basic Engineering Sciences	17	36	31	24	37
Total	307	435	515	541	565

Table (9) Evolution of the number of students in the College of Engineering

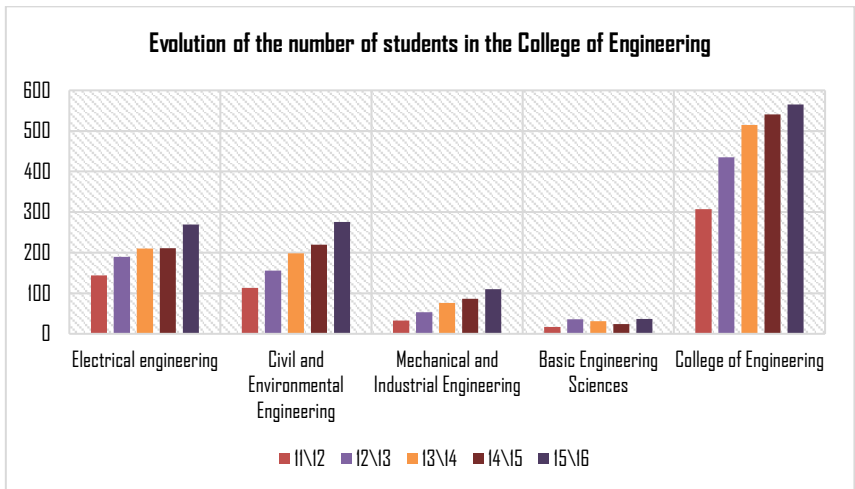


Figure (4) Evolution of the number of students in the College of Engineering

Number of students who were enrolled or apologized

Department	Registered	Regular	Withdrawn	Apologized	Postponed	Other
Electrical engineering	269	159	3	10	2	95
Civil and Environmental Engineering	276	175	0	12	2	87
Mechanical and Industrial Engineering	110	58	3	10	0	39
Basic Engineering Sciences	37	34	3	0	0	0
Total	692	426	9	32	4	221

Table (10) Number of students distributed over Departments

Activities and Students' Services

The College of Engineering is keen to provide students with a variety of activities. These activities include cultural, social, sports and artistic activities. In the year 15/16, the College of Engineering carried out the various types of activities distributed as shown in Table (II). The total number of activities reached 20 different activities and were divided into four main activities: cultural activities, social activities, sports activities and artistic activities.

Activity's Type	Number of Activities	Percentage (%)
Cultural	12	60
Social	3	15
sport	4	20
artist	1	5
Total	20	%100

Table (II): Number of events and their proportion to the total distributed by types of activities



Photo I: The induction day of the departments of the College of Engineering for its new students



Photo (2): Lecture entitled "Intellectual Deviance: Motives and Psychological Reasons



Photo (3): A scientific trip of students from the seventh level in the Department of Civil Engineering



Photo (4): A scientific trip of the students of the Department of Mechanical and Industrial Engineering



Photo (5): Students' visit of the College of Engineering to the Central Library of the University



Photo (6): Students of the electrical engineering department visit the electrical station in the city of Jalajal



Photo (7): Students of the Department of Civil and Environmental Engineering in a scientific visit to the city of Sudair for industry and business



Photo (8): Lecture on the "Corona" virus in the College of Engineering

No	Activity	Type	Place	Beneficiaries	Activity Date
1	Educational lecture entitled "Intellectual Deviance: Motivation and Psychological Reasons" by Dr. Ibrahim Abdullah Al Hussainan.	Educational	College of Engineering	High levels Students	1437/1/6
2	Cultural lecture on Coronavirus by Dr. Asr Sherman from Medical Services.	Educational	College of Engineering	CoE Students	1437/2/6
3	The induction day of the departments of the College of Engineering for its new students	Educational	College of Engineering	CoE Students	1436/11/17

4	Elections and the formation of the Student Advisory Council of the College of Engineering	Educational	College of Engineering	CoE Students	1436/12/12 هـ
5	A workshop for students of the College of Engineering on the assessment of the outcomes of higher education (Assessment)	Educational	College of Engineering	Expected graduates	1437/6/20 هـ
6	A scientific trip for the students of the Department of Civil and Environmental Engineering to the city of Sudair for industry and business	Scientific	City Sodair for business and Industry	Eighth level students and above	1437/1/28 هـ
7	A scientific trip for the students of the Civil and Environmental Engineering Department to the asphalt industry plant that belongs to the city of Sudair for industry and business	Scientific	Cement Industry station	Eighth level students and above	1437/2/7 هـ
8	A scientific trip for the students of the Department of Mechanical and Industrial Engineering to the	Scientific	Water Desalination Plant Majmaah	Eighth level students and above	1437/2/5 هـ

	desalination plant (pumping 2) Almajmaah				
1	A scientific trip for the students of the College of Engineering to the Central Library of the University.	Scientific	Majmaah University Central Library	Selected students from different disciplines	هـ1436/12/29
1	A scientific trip for the students of the Department of Electrical Engineering to the electrical station in the city of Jalajel.	Scientific	Jalajel City	Eighth level students and above	هـ1437/1/26
1	A scientific trip for students of the College of Engineering to King Abdul Aziz City for Science and Technology.	Scientific	King Abdulaziz City for Science and Technology	Graduation Projects Students	هـ1437/5/24
1	The fifth annual exhibition of scientific research and the engineering career day in the College of Engineering	Scientific	College of Engineering	College of Engineering students and faculty members	هـ1437/7/4
1	School students from the King Fahd High School in Al Majmaa visited the College of Engineering	Social	College of Engineering	King Fahd school Students	هـ1437/6/27
1	School students from Ibn Baz High School in Zulfi visited	Social	College of Engineering	Students from Ibn Baz School in Zulfi	هـ1437/6/28

	the College of Engineering				
1	Sport and Student Activities Day of the College of Engineering at Al Faisaly Club.	Sport	Faisali Club	Number of CoE Students	١٤٣٧/٢/٤هـ
1	Students from the College of Engineering to participate in the Saudi Volleyball University Championship after obtaining second place in the university championship	sport	Dammam University	CoE Students	١٤٣٧/٧/٦هـ
1	The work of student committees (sports - social - cultural - trips - Students roving).	sport	Different Places	CoE Students	١٤٣٧/١/٦هـ
1	meeting of preparatory year students wishing to join the College of Engineering		College of Engineering	Preparatory Year Students	٢٠١٦/٣/٣٠

Table (12): Eduational, scientific and sport activities distributed among academic departments

Student Services provided by the college:

- 1- There is a cafeteria, a place for selling books, printing, a Musalla and a health clinic. It is located within the building and serves more than one College and is available by the Deanship of Student Affairs and the University Administration.
- 2 - Engineering Club: It offers scientific and non-academic activities and also table tennis games and billiards
- 3- There is a place in the building dedicated to selling books and photocopying documents

Faculty members

The total number of faculty members distributed according to scientific rank

The number of faculty members and those with a Ph.D degree was 40 male members, of which 6 were Saudi faculty members that representing 15% of the total number. The number of lecturers and teaching assistance was 36, of which 29 were Saudis that represent 80.5%.

Academic Department	Saudi	Non-Saudi	Total
Electrical Engineering	16	15	31
Civil and Environmental Engineering	9	10	19
Mechanical and Industrial Engineering	10	11	21
Basic Engineering Science	0	5	5
Total	35	41	76

Table (13) Distribution of faculty members based on department and nationality

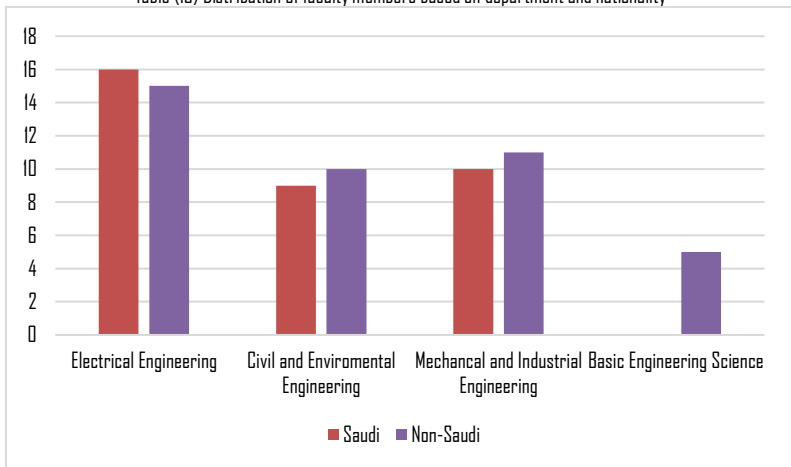


Figure (5): Distribution of faculty members according to the departments and nationality school year 15\16

Academic Department	Prof	Associate Prof	Assistant prof	Lecturer	Teaching Assistant	Total
Electrical Engineering	0	3	10	6	12	31
Civil and Environmental Engineering	1	2	6	3	7	19

Mechanical and Industrial Engineering	3	4	6	5	3	21
Basic Engineering Science	0	0	5	0	0	5
Total	4	9	27	14	22	76

Table (14) Distribution of faculty members according to the scientific rank 15 \ 16

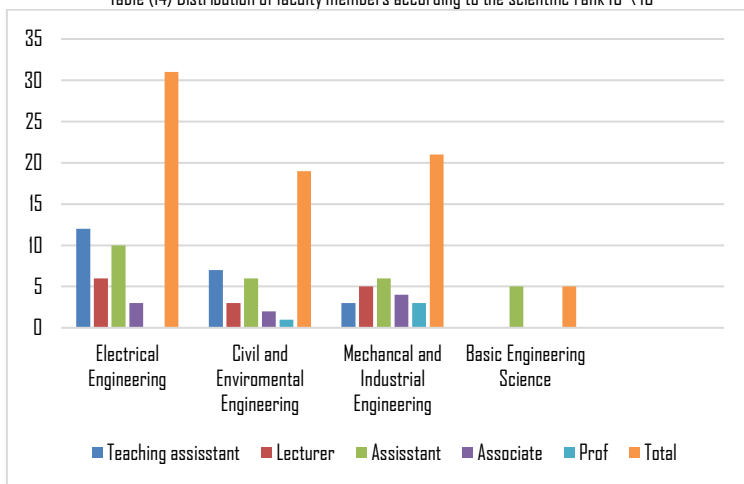


Figure (6): Distribution of faculty members according to the scientific rank 15 \ 16

Table 14 shows the lack of academic specialties for faculty members from the rank of professor and this can be inferred from the lack of graduate studies and the concentration of college on undergraduate education. The mechanical engineering department has taken good steps in scientific research and obtained good grades in the university competitions.

Academic Department	PhD	Fellowship	MSc	High Diploma	BSc	Total
Electrical Engineering	14	0	15	0	2	31
Civil and Environmental Engineering	9	0	5	0	5	19
Mechanical and Industrial Engineering	13	0	6	0	2	21
Basic Engineering Science	5	0	0	0	0	5
Total	41	0	26	0	9	76

Table (15) Distribution of faculty members according to their scientific qualification 15 \ 16

The difference in numbers between Table 14 and Table 15 is due to the presence of faculty members who received a doctorate or master's degree but whose job title has not been changed.

The evolution of the number of faculty members in the recent year distributed according to scientific rank

Faculty members increased comparing to the number of students based on statistics between the academic year 15/16 and the academic year 16/17 for all departments of the college. So it is normal to have a small teacher : student ratio, but it still relatively high, especially for civil and environmental department..

Academic Department	10\11	11\12	12\13	13\14	14\15	15\16
Electrical Engineering	7	14	20	26	26	31
Civil and Environmental Engineering	5	6	7	11	17	19
Mechanical and Industrial Engineering	2	4	8	9	16	21
Basic Engineering Science	0	6	7	5	4	5
Total	14	30	42	51	63	76

Table (16): The evolution of the teaching staff during the past five years

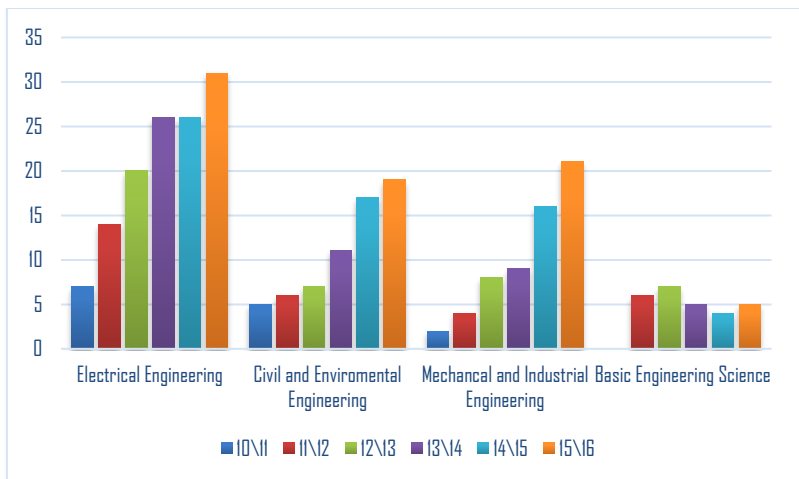


Figure (7): The evolution of the teaching staff during the last five years

The Percentage of each of the faculty members to the numbers of students and the overall percentage

Table (17) shows the rate of professor (PhD) - student distributed based on departments and nationality for the academic year 2015/2016.

The College of Engineering attracts and sustains highly qualified faculty members who have been referred to this challenge in Chapter 8 as challenges and constraints. This is also indicated in the College's Strategic Plan.

Departments	Faculty (PhD Holders)		Students Number	Faculty/Student Ratio
Electrical	Saudi	0	96	1:19.2
	Non-Saudi	5		
Civil and Environmental	Saudi	6	128	1:6
	Non-Saudi	15		
Mechanical and Industrial	Saudi	2	228	1:19
	Non-Saudi	10		
Basic Engineering science	Saudi	5	58	1:3.6
	Non-Saudi	11		
	52	510		1:9.8

Table (17) Distribution of faculty members and the like on academic departments by nationality and preparation of students

The ratio of Faculty / student for academic specializations falls within the standards as shown in Figure 8. The percentages are within the performance indicators ratios.

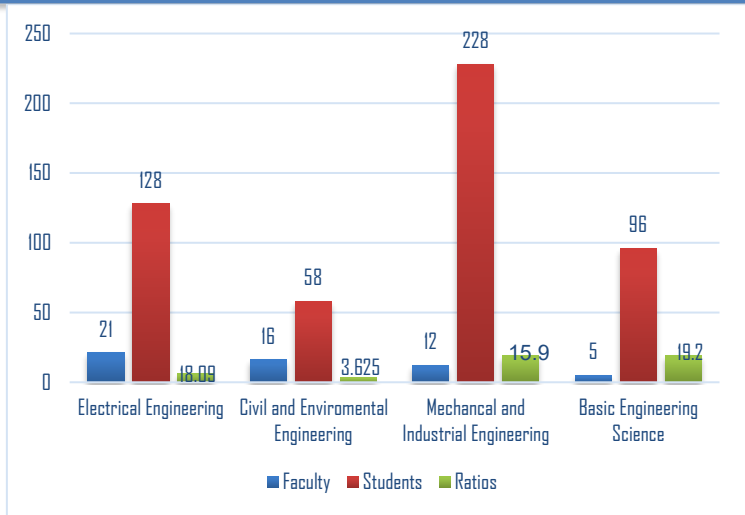


Figure (8): Faculty: student for academic specializations at the College of Engineering

Case	Total Number	Electrical Engineering			Mechanical and Industrial			Civil and Environmental		
		Academic Rank	Academic Rank	Academic Rank	Academic Rank	Academic Rank	Academic Rank	Academic Rank	Academic Rank	
		Prof	Associate prof	Assiss prof	Prof	Associa te prof	Assiss prof	Pro f	Associat e prof	Assis s prof
Designation	7	-	1	4	1	0	1	-	-	-
Promotion	3	-	1	-	-	2	-	-	-	-
Sabbatical	-	-	-	-	-	-	-	-	-	-
Emeritus	-	-	-	-	-	-	-	-	-	-

Table (18) Number of faculty members who have been appointed or promoted or have obtained a scientific degree or equivalent 15/16

Reason for Leaving	Number	Academic Rank			Lecturer
		Prof	Associate prof	Assiss prof	
Resignation	2	1	1	-	-

Table (19) Number of faculty members and the like who left

Scholarships and Training

Detailed statistical data according to scholarships

Number of scholarships reached 28 by the end of 2016 distributed over three academic

1- New Saudi scholars

Academic Departments	Speicilization	Degree required	Country
Electrical Engineering	1	MSc	England
Civil and Environmental Engineering	-	-	-
Mechanical and Industrial Engineering	-	-	-
Total	1	-	-

Table (20) shows the number of Saudi new Scholars

2. Scholars

Academic Departments	Total	Degree required	
		MSc	PhD
Electrical Engineering	9	7	2
Civil and Environmental Engineering	6	5	1
Mechanical and Industrial Engineering	5	3	2
Total	20	15	5

Table (21) scholars currently studying

3- Scholars returning

Academic Rank	Total Number	Degree required		Graduates who did not receive the required degree	Reasons
		MSc	PhD		
Electrical Engineering	5	1	4	1	Did not obtain University acceptance
Civil and Environmental Engineering	2	0	2	2	Did not obtain University acceptance

Mechanical and Industrial Engineering	1	0	1	1	Did not obtain University acceptance
Total	7	1	6	4	

Table (22) shows the number of students returning from their scholarships

Table 23 shows the names of Saudi Scholars in the field of Electrical Engineering (Electrical Engineering Department).

N	Scholar Name	Degree	Minor	Date of Scholarship
1	ابراهيم نقان المطيري	MSc	Communications and Electronics	1435\3\4
2	بندر هليل عطشان الظفيري	BSc	Communications and Electronics	1431\7\25
3	عبد العزيز داخل صائيل المطيري	BSc	Power and Machines	1431\4\27
4	أنس عبد المحسن محمد المنيف	BSc	Power and Machines	1434\3\11
5	عبد العزيز سعود التويجري	BSc	Control and Systems	1433\2\9
6	عبد الله ابراهيم عبد الله الجمعة	BSc	Electronics	1433\5\3
7	وليد حمود حلسان الحربي	BSc	Power and Machines	1432\5\27
8	محمد ناصر منصور المنصور	BSc	Communications and Electronics	1433\1\22
9	نايف فايز تركي البقمي	MSc	Power and Machines	19/1/1436

Table (23) Names of Saudi Scholars in Electrical Engineering

Table 24 shows the names of Saudi Scholars in the field of Mechanical Engineering (Mechanical and Industrial Engineering Department).

N	Scholar Name	Degree	Minor	Date of Scholarship
1	محمد صالح العبيد	MSc	Fluids and refractories	1434\5\27
2	إبراهيم محمد العريفي	MSc	Industrial Engineering	1434\10\6
3	أحمد عبد الرحمن الجبر	BSc	General	1433\10\17
4	حمد ناصر العاصم	BSc	General	1433\12\6
5	عبد الله صالح رشيد التميمي	BSc	General	1433\6\17

Table (24) Names of Saudi Scholars in Mechanical Engineering

Table 25 shows the names of Saudi Scholars in the field of Civil Engineering (Civil and Environmental Engineering Department).

N	Scholar Name	Degree	Minor	Date of Scholarship
1	محمد عبد العزيز التركي	BSc	Construction	1435\6\2
2	مشعل حمود الجريوع	MSc	Transportaion	1/7/1435
3	عبد الله حمود الزلفاوي	BSc	Construction	1434\4\25
4	هاني محمد قريبان العنزي	BSc	Construction	1432\4\20
5	محمد إبراهيم عبد المحسن البعيمي	BSc	Transportaion	6/5/1436
6	عبد الملك حمود التويجري	BSc	Enviroment	14/3/1436

Table (25) The names of Saudi Scholars in the field of Civil Engineering

It is noted from the tables (23 to 25) the diversity of specilizations for scholars and the need of the college for different specilizations at the present time. In some academic departments, emphasis has been placed on specific specilizations, which are based on the current shortage of faculty members, especially for higher levels.

It is normal that new established colleges try from the beginning to rely on qualified teaching staff with specialized scientific degrees that meet the needs of the college. This can only be achieved by means of scholarships of specific specializations. This is illustrated in Figure (9)

Figure (9) shows the increase in the number of scholarships by year for all departments in the college and shows the number of scholars in the coming year.

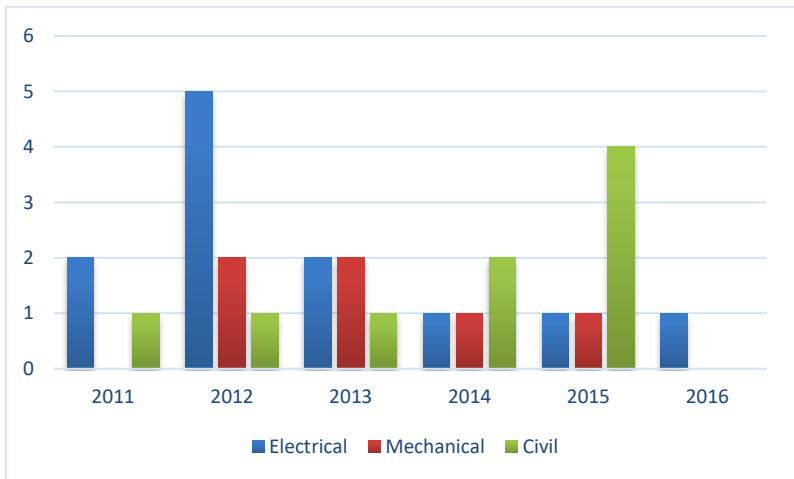


Figure (9): The number of scholarship students distributed according to academic years and specialization

N	Scholar's Name	New	Current	Returned
1	ابراهيم نقان المطيري		X	
2	بندر هليل عطشان الظفيري		X	
3	عبد العزيز داخل صايل المطيري		X	
4	عبد الله صالح رشيد التميمي			X
5	عمر حمود غزاي الحربي			X
6	أنس عبد المحسن محمد المنيف		X	
7	فيصل سعد هلال الحربي			X
8	عبد العزيز سعود التويجري		X	
9	عبد الله ابراهيم عبد الله الجمعة	X		
10	وليد حمود حلسان الحربي		X	
11	أحمد عبد الله عبد المحسن التويجري			X
12	بدر سعود دعييس الحربي		X	
13	محمد ناصر منصور المنصور		X	
14	نايف فايز تركي البقمي	X		
15	محمد صالح العبيد		X	
16	إبراهيم محمد العريفي		X	
17	سعيد مبارك الدوسري			X
18	أحمد عبد الرحمن الجبر		X	
19	حمد ناصر العاصم		X	
20	سعد متعب الشمري	X		X
21	محمد عبد العزيز التركي			X
22	عاصم ابراهيم العقيلي			X
23	مشعل حمود الجربوع		X	
24	عبد الله حمود الزلفاوي			X
25	احمد هليل هلال المطيري			X
26	هاني محمد قريبان العنزي		X	
27	محمد إبراهيم عبد المحسن البعيمي	X		
28	عبد الملك حمود التويجري	X		

Table (26) The names of the Saudi Scholars in the College of Engineering

Developing the skills of faculty members:

The following table (27) shows the number of training courses that provided to develop the skills of faculty members including the training course name, the number of beneficiaries, date and place.

N	Training Name	Trainer	Beneficiaries	Date	Place
1	Preparing the course portfolio and writing the course report	College of Engineering	All Faculty	10\8\1437	College of Engineering
2	Workshop: Standards and additional requirements for ABET Academic Accreditation	College of Engineering	All Faculty	18\7\1437	College of Engineering
3	Activating the fifth phase of learning system D2L	College of Engineering	All Faculty	27\6\1437	College of Engineering
4	Workshop: Completing activation of D2L tools	College of Engineering	All Faculty	22/5/1437	College of Engineering
5	Workshop: Indirect Assessment and Faculty Report "	College of Engineering	All Faculty	17\4\1437	College of Engineering
6	Workshop: Assessment and evaluation of LOs in the college of Engineering	College of Engineering	All Faculty	12\3\1437	College of Engineering
7	Publication in ISI Scientific Journals	College of Engineering	All Faculty	5\3\1437	College of Engineering
8	Workshop: Testing and measurements of Antenna Systems	College of Engineering	Electrical Engineering	4\3\1437	College of Engineering
9	Workshop: D2L	College of Engineering	All Faculty	10\2\1437	College of Engineering
10	Workshop: ABET Fourth Criterion	College of Engineering	All Faculty	28\1\1437	College of Engineering
11	Workshop: Academic Advising in the college of Engineering	College of Engineering	All Faculty	5\1\1437	College of Engineering

Table (27) Developing the skills of faculty members

Training courses to the develop the skills of the administrative staff

N	Trainee Name	Training Course Name	Place	Date	Organizer
1	محمد عثمان البرغش	Electronic Archiving	Riyadh	1437/05/15	Institute of Management
2	خليفة سوندي السويطي	Advanced word processing skills	Riyadh	1437/05/26	Institute of Management
3	محمد فهد القاسم	Government financial reports government accounting in the branches	Riyadh	1436/12/24 1437/06/14	Institute of Management

4	ابراهيم حمد العيسى	Direct public funds	Riyadh	1437/03/02	Institute of Management
5	فارس سعد السعيد	Government financial reports government accounting in the branches	Sharqi ya Sharqi ya	1437/03/19 1437/05/01	Institute of Management
6	بدر ناصر المطيري	Skills of dealing with beneficiaries	Mecca	1437/02/10	Institute of Management
7	عبدالله سليمان المشل	Electronic tables (Excel)	Sharqi ya	1436/12/21	Institute of Management
8	مؤيد عبدالله الجاسر	Principles of Government Accounting	Sharqi ya	1437/05/29	Institute of Management
9	بندر موافق العنزي	Effective communication at work Skills of dealing with beneficiaries	Riyadh	1437/04/10 1437/04/28	Institute of Management
10	ناصر ابراهيم التركي	The behavior of public office Bank guarantees	Sharqi ya Riyadh	1437/04/10 1437/06/21	Institute of Management

Table (28) Training courses to develop the skills of the administrative body

Scientific and Educational Activities

Scientific Research

The College of Engineering gives a great importance to scientific research and encourages it through participation in local and international scientific conferences as well as applying for financial support from the Deanship of Scientific Research for pioneering projects serving the region and society. Table (29) shows the number of researches supported by faculty members in the College of Engineering:

Funding Side	Academic Year 11\12	Academic Year 12\13	Academic Year 13\14	Academic Year 14\15	Academic Year 15\16	Total
Center for Engineering and Applied Sciences Research and Basic Sciences Unit	13	6	9	2	2	32

Table (29) Number of scientific researches funded in the College of Engineering for the last five years

The above table shows that the total number of researches supported by the Deanship of Scientific Research is 32 distributed over four academic departments. Table (30) shows the number of researches obtained by the Deanship of Scientific Research distributed among the scientific departments in the College of Engineering

Department	Academic Year 11\12	Academic Year 12\13	Academic Year 13\14	Academic Year 14\15	Academic Year 15\16	Total
Electrical Engineering	4	2	2	2	1	11
Civil and Environmental Engineering	6	1	1	0	0	8
Mechanical and Industrial Engineering	2	2	3	0	0	7
Basic Engineering Science	1	1	3	0	1	6
Total	13	6	9	2	2	32

Table (30) Number of researches obtained by the Deanship of Scientific Research

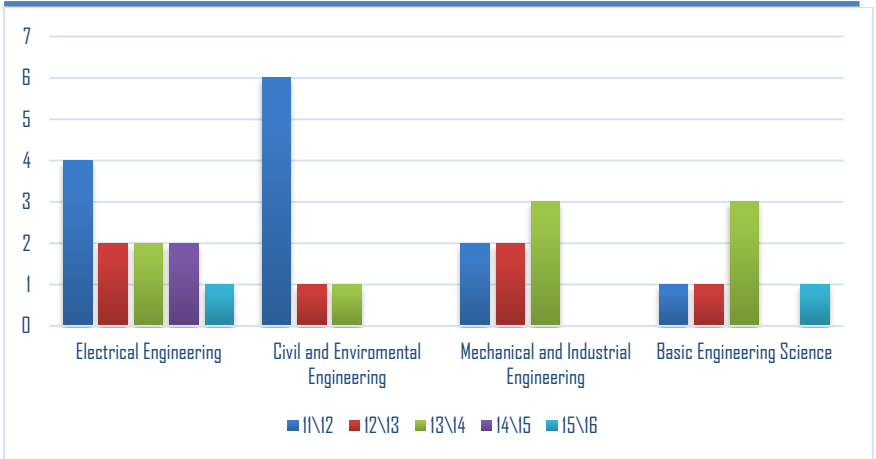


Figure (10) Distribution of the number of scientific research supported by the Deanship of Scientific Research distributed to the scientific departments



Photo (9) Awarding the Distinguished Achievement Award by Dr. Iskandar Altilli from the Department of Mechanical Engineering

6- Workshop in the College of Engineering entitled: (How to publish in scientific journals ISI Journal)
In order to advance scientific research in the College of Engineering forward, the College of Engineering organized a workshop on how to publish in scientific journals under the terms of the International Scientific Indexing (ISI). The Professor David Goldzman of the Georgia Institute of Technology presents the workshop.



Photo (10) Part of a workshop how to publish in scientific journals ISI Journal

Department	Total No. of Papers in Journals/Year											Total No. of Papers in Conferences/Year					Total No. of Papers in each Department
	2010	2011	2012	2013	2014	2015	2016	2010	2011	2012	2013	2014	2015	2016	2010-2016		
Mechanical and Industrial Engineering Department	-	3	8	10	9	17	6	2	-	2	4	3	6	-	70		
Electrical Engineering Department	-	-	5	5	4	4	6	-	-	3	6	2	2	3	39		
Civil and Environmental Engineering Department	-	1	-	4	5	4	3	2	4	-	2	1	3	-	29		

Basic Engineering Sciences	-	-	-	1	20	28	5	-	-	-	-	3	6	-	63
Total No. of Papers in the College of Engineering															201

Table (31) shows scientific research published during the period (2010-2016)

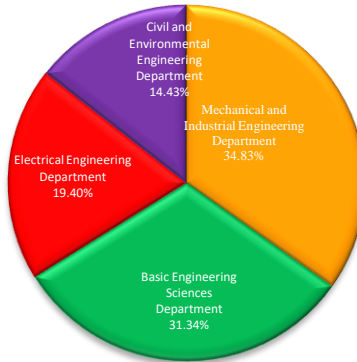


Figure (11): Percentage of scientific research on academic disciplines

During the year 15/16 faculty members of the College of Engineering published many scientific researches in scientific journals, 70 scientific research and 21 researches in national and international scientific conferences and the publication of two books and the registration of one patent. The following figure shows the distribution of scientific research published in scientific journals and conferences distributed over the departments:

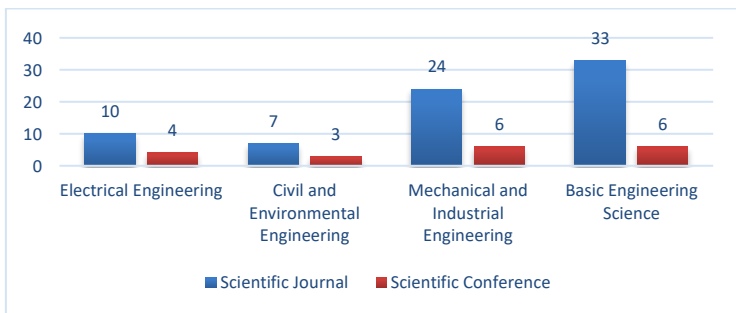


Figure (12) Distribution of scientific researches published in scientific journals and conferences distributed to the scientific departments

Tables (32) - (40) shows the names of research published in scientific journals and conferences, local and international in the various scientific sections*.

Mechanical and Industrial Engineering Department

Journals

N o .	Authors	Article Title	Journal Name	Year	Volume	Issue No.	PP.
1	Abdullah A. Alabdulkarim, Peter D. Ball, and Ashutosh Tiwari	Assessing Asset Monitoring Levels for Maintenance Operations: A Simulation Approach	Journal Manufacturing Technology Management	2015	26	5	
2	Muhammad Al-Salamah	Constrained Binary Artificial Bee Colony to Minimize the Makespan for Single Machine Batch Processing with Non-Identical Job Sizes	Applied Soft Computing	2015	29		379 - 385
3	Muhammad Al-Salamah	Economic Production Quantity in Batch Manufacturing with Imperfect Quality, Imperfect Inspection, and Destructive and Non-destructive Acceptance Sampling in a Two-Tier Market	Computers and Industrial Engineering	2016	93	March	275 - 285
4	S. A. Karrab, Mohamed S. Aboraia M. A. Doheim and S. M. Ahmed	Investigation into Morphology of Cavitation Erosion-Corrosion Pits on the Surface of Carbon Steel	International Journal of Engineering and Information Technology (IJEIT)	October, 2014	1	1	28-35
5	Saleh, B. Abouel-Kasem, A. and Ahmed, S. M.	Effect of Surface Properties Modification on Slurry Erosion-Corrosion Resistance of AISI 5117 Steel	Journal of Tribology	2015	137	031105	1-8
6	M.A. Al-Bukhaiti, A. Abouel-Kasem, K.M. Emara and S.M. Ahmed	Particle Shape and Size Effects on Slurry Erosion of AISI 5117 Steels	Journal of Tribology	2016	138	April	Doi: 10.1151/14031987
7	Zainul Huda	Materials Selection in Design of Structures and Engines of Supersonic Aircrafts: A Review	Materials and Design	April, 2013	46	doi:10.1016/j.matdes.2012.10.001	552 - 560

8	Saed A. Musmar, Nasim Razavinia, Frank Mucciardi and Iskander Tili	Performance Analysis of a New Waste Heat Recovery System	International Journal of Thermal and Environmental Engineering	2015	10	1	1-7
9	K. Ramadan and I. Tili	A Numerical Study of the Extended Graetz Problem in a Microchannel with Constant Wall Heat Flux: Shear Work Effects on Heat Transfer	Journal of Mechanics	May, 2015			1-11
10	S.A. Musmar, A.T. Al-Halhouli, I. Tili and S. Buttgenbach	Performance Analysis of a New Water Based Micro-Cooling System	Experimental Heat Transfer	2015			
11	K Ramadan and Iskander Tili	Shear Work, Viscous Dissipation and Axial Conduction Effects on Microchannel Heat Transfer with a Constant Wall Temperature	Journal of Mechanical Engineering Science	2015			1-12
12	A. Sa'ed and Iskander Tili	Numerical Investigation of Working Fluid Effect on Stirling Engine Performance	International Journal of Thermal and Environmental Engineering	2015	10	1	31-36
13	Iskander Tili	Renewable Energy in Saudi Arabia: Current Status and Future Potentials	Environment, Development and Sustainability	2015	17	4	859 - 886
14	T. M. EL-Bagory, H. Sallam and M. Younan	Evaluation of Fracture Toughness Behavior of Polyethylene Pipe Materials	Journal of Pressure Vessel and Technology	December, 2015	137	6	doi: 10.1115/1.4029925
15	T. M. EL-Bagory, Tawfeeq A. Alkanhal and Younan, M.A	Effect of Specimen Geometry on the Predicted Mechanical Behavior of Polyethylene Pipe Material	Journal of Pressure Vessel and Technology	December, 2015	137	6	
16	T. M. EL-Bagory and Younan, M.A.	Crack Growth Behavior of Pipes Made from Polyvinyl Chloride Pipe Material	Journal of Pressure Vessel and Technology	2016	Accepted	Accepted	
17	Vakkar Ali	An Experimental Study of Aerodynamic Drag on the Body of Road Vehicle	Journal of Pure and Applied Science and Technology	July, 2015	5	2	9-21

18	Vakkar Ali	Aerodynamic Drag Analysis on the Body of Indian Road Car	International Journal of Allied Practice, Research and Review	November, 2015	Nov. 2015	Accepted	
19	S. Chandra and Sunil Sharma	Implementation of total Productive Maintenance (TPM) in Indian Industries using Least Square Multi Attribute Decision Model (LSMADM)	International Journal of Advanced Technology in Engineering and Science	March, 2015	3	1	1630 - 1640
20	A.M. Alklaibi	Experimental and Theoretical Investigation of Internal Two-Stage Evaporative Cooler	Energy Conversion and Management	May, 2015	95	May	140 - 148
21	Waqar Ahmed Khan	Effects of Thermal Radiation on Casson Flow Heat and Mass Transfer Around a Circular Cylinder in Porous Medium	The European Physical Journal Plus	September, 2015	130	September	188 - 200
22	Waqar Ahmed Khan	Heat and Mass Transfer in Nanofluid Thin Film over an Unsteady Stretching Sheet using Buongiorno's Model	The European Physical Journal Plus	January, 2016	131	1	1-11
23	Waqar Ahmed Khan	Non-Aligned MHD Stagnation Point Flow of Variable Viscosity Nanofluids Past a Stretching Sheet with Radiative Heat	International Journal of Heat and Mass Transfer	May, 2016	96	5	525 - 534
24	Waqar Ahmed Khan	Electro kinetic Effects on Pressure Driven Flow of Viscoelastic Fluids in Nanofluidic Channels with Navier Slip Condition	Journal of Molecular Liquids	March, 2016	215	3	472 - 480

Table (32) Research Papers in the Department of Mechanical and Environmental Engineering

Conferences

N	Authors	Article Title	Name of Conference	Year	Number	Country
1	S. A. Karrab, M. A. Doheim, Mohamed S. Mohammed and S. M. Ahmed	Effect of Electroless Ni-Co-P and Co-P Coatings on Cavitation Erosion Resistance	Proceedings TMS Middle East - Mediterranean Materials Congress on Energy and Infrastructure Systems (MEMA 2015) (eds I. Karaman, R. Arróyave and E. Masad), John Wiley & Sons, Inc.	11-14 January, 2015	doi: 10.1002/97811193090427.ch9	Hoboken, NJ, USA.

2	T. M. EL-Bagory, Sallam, H.E.M. and Younan, M.A.	Validation of Linear Elastic Fracture Mechanics in Predicting the Fracture Toughness of Polyethylene Pipe Materials	Proceedings of the ASME 2015 Pressure Vessels & Piping Division / K-PVP Conference PVP 2015	19-23 July, 2015	PVP 2015-45651	Boston, Massachusetts, USA
3	T. M. EL-Bagory and Younan, M.A.	Crack Growth Behavior of Pipes Made from Polyvinyl Chloride Pipe Material	Proceedings of the ASME 2015 Pressure Vessels & Piping Division / K-PVP Conference PVP 2015	19-23 July, 2015	PVP 2015-45657	Boston, Massachusetts, USA
4	Wseem S. Khan	Co-Axial Electrospinning of Strontium Titanate Nanofibers Associated with Nickel Oxide Nanoparticles for Water Splitting	The Composites and Advanced Materials Exposition (CAMX) Conference Proceedings	26-29 October, 2015	CAMX 2015	Dallas, Texas, USA
5	Wseem S. Khan	Thermal and Electrical Properties of Carbonized Pan Nano-Fibers for Improved Surface Conductivity of Carbon Fiber Composites	The Composites and Advanced Materials Exposition (CAMX) Conference Proceedings	26-29 October, 2015	CAMX 2015	Dallas, Texas, USA
6	Vakkar Ali	A Study of Aerodynamic Drag on the Body of Indian Maruti Esteem Car	International Conference on Innovative Research in "Mechanical, Electrical, Electronics, Civil, Computer Science and Information Technology"	16th,17th May, 2015	MECIT-2015	New Delhi, India

Patents

No.	Author	Title of Patent	Country	Patent Number	Year
1	Tarek EL-Bagory	Special Pre-Crack Machine for Water and Natural Gas Piping Systems	King Abdul-Aziz City for Science and Technology, KSA	4406	2015

Table (33) Research presented at the conferences of the Department of Mechanical and Environmental Engineering

Electrical Engineering Department

Journals

No.	Authors	Article Title	Journal Name	Year	Volume	Issue	PP.
1	Al-Qawasmi A.K and Omar A.M. Aly	Low-Complexity FEC Encoding Technique Based Special Selected Codes	International Journal for Research and Development, in Technology	January, 2016	3	1	18-24
2	Ibrahim N. Abu Isbeh, Abdel-Rahman Al-Qawasmi and Nid'a Al-Shafi	Prove the Harm of Cell Phone via Biological Experiments	Research Journal of Pharmaceutical, Biological and Chemical Sciences (RJPBCS)	2016	7	3	Accept
3	Ahmed Galal Abokhalil and Sameh Ahmed	Water-Pumping using Powered Solar System - More than an Environmentally Alternative: The Case of Toshka, Egypt	Journal of Energy and Natural Resources	February, 2016	5	1	19-25
4	Ahmed Bilal and Ahmed Galal Abokhalil	Feasibility and Estimation of Technical Potential and Calculation of Payback Period of Roof-Top Solar PV System in the City of Majmaah, Province of Riyadh, K.S.A	Journal of Energy and Natural Resources	January, 2016	5	1	12-18
5	Ahmed-Bilal Awan	Renewable Energy: A Solution to Hazardous Emissions.	Journal of Energy and Natural Resources. Special Issue: Electrical Power Resources: Coal Versus Renewable Energy	February, 2016	5	1	6-11

6	E. M. Barhoumi, F. Wurtz, C. Chillet, B. Ben Salah and O. Chadebec	Efficient Reluctance Network Formulation for Modeling Design and Optimization of Linear Hybrid Motor.	IEEE Transactions on Magnetics.	March, 2016	52	3	
7	Muhammad Zubai, Memoon Sajid Yang Hai Doh, Kyaung-Hoan Na and Kyung Hyun Choi	Flexible Large Area Organic Light Emitting Diode Fabricated by Electrohydrodynamics Atomization Technique	Journal of Materials Science: Materials in Electronics	September, 2015	26	9	7192-7199
8	Siva Agora Saktivel Murugan k. and Mohammad Abdul Baseer	Experimental Study of Photo Voltaic Systems and Converter	International Journal of Electrical and Electronics Engineering Research	February, 2015	5	1	107-110
9	K. Siva Agora Saktivel Murugan, Mohammad Abdul Baseer and R. Jothin	Experimental Study of Photo Voltaic Systems and Converters	Middle-East Journal of Scientific Research (DOSI)	March, 2015	23	4	652-655
10	Mohammad Abdul Baseer, Ahmed Galal Abo Khalil and Siva Agora Saktivel Murugan	Positioning and Adjusting the Frequencies of the Rotor in Permanent Magnet Synchronous Machine to Achieve High Performances	International Journal of Applied Engineering Research	March, 2015	10	59	379-386

Table (34) Publications in journals in the Department of Electrical Engineering

Conference

No.	Authors	Article Title	Name of Conference	Year	Number	Country
1	Ahmed G. Abo-Khalil	Sensorless Gradient Approximation Controller for Maximum Power Point Tracking of Grid Connected PV System	Middle East Power System Conference MEPCON 2015	15-17 Dec. 2015	325	El Mansoura, Egypt
2	Omar A. M. Aly	Two-Stage Spectrum Sensing Algorithm for Low Power Signals in Cognitive Radio	The Second Saudi International Electronics, Communications and Photonics	30-27 April, 2013	978-1-4673-6195-8	Riyadh, KSA

			Conference SIEEPC'13			
3	Youcef Berrouche, Ahmed G. Abo-Khalil and Abdullah Almuhaissen	Quebec: a Source of More than 5000MW of Clean Sustainable Energy Using Salinity Gradient Power Technology	International Conference on Sustainable Mobility Applications, Renewables and Technology (SMART2015)	November 23-25, 2015.	52	Kuwait
4	M. I. Hussein; Ali Hakam and Mohamed Ouda	Planar Ultra-Wideband Elliptical Antenna for Communication Applications	IEEE Wireless Communications and Networking Conference (WCNC'16)	Qatar, 3-6 April, 2016.	Accepted	Doha
5	M. I. Hussein; Ali Hakam; Mohamed Ouda; Raed Shubair	Compact Low-Profile Planar Elliptical Antenna for UWB Applications.	The 10th European Conference on Antennas and Propagation	10-15 April, 2016	Accepted for presentation in	Switzerland
6	Ali Hakam, M. I. Hussein, Mohamed Ouda, Raed Shubair and Elham Serria	Novel Circular Antenna with Elliptical Rings for Ultra-Wide-Band	The 10th European Conference on Antennas and Propagation	10-15 April, 2016	Accepted for presentation in	Switzerland

Table (35) Research Papers published in Conferences in the Department of Electrical Engineering

Civil and Environmental Engineering Department

Journals

No.	Authors	Article Title	Journal Name	Year	Volume	Issue	PP.
1	Ahmed Galal Abokhalil and Sameh Ahmed	Water-Pumping using Powered Solar System - More than an Environmentally Alternative: The Case of Toshka, Egypt	Journal of Energy and Natural Resources	February, 2016	5	1	19-25
2	Amjad Khabaz	2D Investigation of Bonding Forces of Straight Steel Fiber in Concrete	Open Access Library Journal	October, 2015	2	e1991	1-8

3	Amjad Khabaz	Impact of Fiber Shape on Mechanical Behavior of Steel Fiber in Fiber Reinforced Concrete FRC.	World Journal of Engineering and Physical Sciences	January, 2015	3	1	1-6
4	Amjad Khabaz	Determination of Friction Coefficient Between Straight Steel Fiber and the Concrete (SSF.C)	Advances in Materials	2015	4	2	20-29
5	Amjad Khabaz	Monitoring of Impact of Hooked Ends on Mechanical Behavior of Steel Fiber in Concrete	Construction and Building Materials	June 2016	113	15 June	857-863
6	Shadab Ahmad and Zia Ur Rehman	Performance Assessment of Innovative Constructed Wetland-Microbial Fuel Cell for Electricity Production	International Journal of Modern Sciences and Engineering Technology	2015	2	11	34-44
7	Baig, Z. I., Saleh, H. A., and Husain, A.	Punching of Slab-Column Connections Strengthened using External Steel Shear Bolts	Magazine of Concrete Research	2016	68	2	55-68

Table (36) Publications in Journals in the Department of Civil and Environmental Engineering

Conferences

No.	Authors	Article Title	Name of Conference	Year	Number	Country
1	Amjad Khabaz	Numerical Method to Find Friction Coefficient of Steel Fiber in Concrete	2nd International Conference "Innovative Materials, Structures and Technologies"	September 30 - October 2, 2015	pp. 58-58, ISBN 978-9934-10-742-9.	Riga, Latvia
2	Yousef H. Okour and Sameh S. Ahmed	Production of Titania Nano-particles from Waste-Sludge	The Third International Conference on Water, Energy and Environment (ICWEE)	2015	-	UAE
3	Yousef H. Okour and Sameh S. Ahmed	Recovery of Titania from Waste-Sludge of Majmaah Water Treatment Plant	The Third International Conference on Water, Energy and Environment (ICWEE)	2015	-	UAE

Table (37) Publications in conferences in the Department of Civil and Environmental Engineering

Books

No.	Author	Title of Book	Publisher Name	Year	ISBN
1	Sameh S. Ahmed	Characterization of Groundwater Quality Parameters using Geostatistics	LAMBERT Academic Publishing Schaltungsdienst Lange o.H.G., Berlin, 230P (Germany)	2015	978-3-659-57074-2

2	Sameh S. Ahmed	Architectural Buildings in Desert Environments: An Engineering Perspective	Majmaah university	2016	Under publication
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Table (38) Books published in the Department of Civil and Environmental Engineering

Basic Engineering Sciences

Journals

No.	Authors	Article Title	Journal Name	Year	Volume	Issue No.	PP.
1	Rifaqat Ali Khan Rao, Shaista Ikram and Mohammad Kashif Uddin	Removal of Cr (VI) from Aqueous Solution on Seeds of Artimisia Absinthium (Novel Plant Material)	Desalination and Water Treatment	June, 2015	54	June	3358-3371
2	Gul Aaiza, Ilyas Khan, Sharidan Shafie	Energy Transfer in Mixed Convection MHD Flow of Nanofluid Containing Different Shapes of Nanoparticles in a Channel Filled with Saturated Porous Medium	Nanoscale Research Letters	2015	10	1	1-14
3	Asma Khalid, Ilyas Khan, Arshad Khan, Sharidan Shafie	Conjugate Transfer of Heat and Mass in Unsteady Flow of A Micropolar Fluid with Wall Couple Stress	AIP Advances	2015	5	12	127125
4	Muhammad Altaf Khan, Qaisar Badshah, Saeed Islam, Ilyas Khan, Sharidan Shafie, Sher Afzal Khan	Global Dynamics of Seirs Epidemic Model with Non-Linear Generalized Incidences And Preventive Vaccination	Advances in Difference Equations	2015	2015	1	1-8
5	Ilyas Khan, Farhad Ali, Norzieha Mustapha and Sharidan Shafie	Closed-Form Solutions for Accelerated MHD Flow of A Generalized Burgers' Fluid in a Rotating Frame and Porous Medium	Boundary Value Problems	2015	2015	1	1-17
6	Aaiza Gul, Ilyas Khan, Sharidan Shafie, Asma Khalid and Arshad Khan	Heat Transfer in MHD Mixed Convection Flow of a Ferrofluid Along a Vertical Channel	PloS one	2015	10	11	e0141213

7	Asma Khalid, Ilyas Khan, Arshad Khan and Sharidan Shafie	Unsteady MHD Free Convection Flow of Casson Fluid Past over an Oscillating Vertical Plate Embedded in a Porous Medium	Engineering Science and Technology, an International Journal	2015	18	3	309-317
8	Sami Ul Haq, Ilyas Khan, Farhad Ali, Arshad Khan, Tarek Nabil Ahmed Abdelhameed	Influence of Slip Condition on Unsteady Free Convection Flow of Viscous Fluid with Ramped Wall Temperature	Abstract and Applied Analysis	2015	2015		
9	Arshad Khan, Ilyas Khan, Farhad Ali, Asma Khalid and Sharidan Shafie	Exact Solutions of Heat and Mass Transfer with MHD Flow in a Porous Medium under Time Dependent Shear Stress and Temperature	Abstract and Applied Analysis	2015	2015		
10	Taza Gul, Saeed Islam, Rehan Ali Shah, Asma Khalid, Ilyas Khan, Sharidan Shafie	Unsteady MHD Thin Film Flow of an Oldroyd-B Fluid over an Oscillating Inclined Belt	PloS one	2015	10	7	e0126698
11	Taza Gul, Saeed Islam, Rehan Ali Shah, Ilyas Khan, Sharidan Shafie and Muhammad Altaf Khan	Analysis of Thin Film Flow Over a Vertical Oscillating Belt with a Second Grade Fluid	Engineering Science and Technology, an International Journal	2015	18	2	207-217
12	Ilyas Khan	A Note on Exact Solutions for the Unsteady Free Convection Flow of a Jeffrey Fluid	Zeitschrift für Naturforschung A	2015	70	6	397-401
13	Asma Khalid, Ilyas Khan and Sharidan Shafie	Unsteady Boundary Layer Flow of a Casson Fluid Past an Oscillating Vertical Plate with Constant Wall Temperature	Malaysian Journal of Fundamental and Applied Sciences	2015	11	1	

14	Abid Hussanan, Mohd Z Salleh, Ilyas Khan, Razman M Tahar and Zulhibri Ismail	Soret Effects on Unsteady Magneto hydrodynamic Mixed-Convection Heat-and-Mass-Transfer Flow in a Porous Medium with Newtonian Heating	Maejo International Journal of Science and Technology	2015	9	2	224-245
15	Hakeem Ullah, Saeed Islam, Ilyas Khan, Sharidan Shafie, Mehreen Fiza	Formulation and Application of Optimal Homotopy Asymptotic Method to Coupled Differential-Difference Equations	PLoS one	2015	10	4	e0120127
16	Asma Khalid, Ilyas Khan and Sharidan Shafie	Exact Solutions for Free Convection Flow of Nanofluids with Ramped Wall Temperature	The European Physical Journal Plus	2015	130	4	1-14
17	Taza Gul, Saeed Islam, RA Shah, Ilyas Khan and LCC Dennis	Temperature Dependent Viscosity of a Third Order Thin Film Fluid Layer on a Lubricating Vertical Belt	Abstract and Applied Analysis	2015	2015		
18	Asma Khalid, Ilyas Khan, Sharidan Shafie	Exact Solutions for Unsteady Free Convection Flow of Casson Fluid over an Oscillating Vertical Plate with Constant Wall Temperature	Abstract and Applied Analysis	2015	2015		
19	H Ullah, S Islam, S Sharidan, T.N Abdelhameed and Ilyas Khan	Efficient Implementation of Modified Asymptotic Method for the Solution of Nonlinear Coupled Partial Differential Equations	Indian Journal of Science and Technology	2015	8		136-148
20	Lim Yean Jiann, Asma Khalid, Ilyas Khan and Sharidan Shafie	Heat Transfer in MHD Flow of a Rotating Fluid with Soret and Radiation Effects: Exact Solution	International Review of Chemical Engineering (IRECHE)	2015	7	1	29-36

21	Muhammad Altaf Khan, Syed Farasat Siddiq, Saeed Islam, Ilyas Khan and Sharidan Shafie	Dynamic Behavior of Leptospirosis Disease with Saturated Incidence Rate	International Journal of Applied and Computational Mathematics	2015			1-18
22	Abid Hussanan, Mohd Zuki Salleh, Ilyas Khan and Razman Mat Tahar	Unsteady Free Convection Flow of a Micropolar Fluid With Newtonian Heating: Closed form Solution	Thermal Science	2015	0		125-125
23	Ilyas Khan and Sharidan Shafie	Rotating MHD Flow of a Generalized Burgers Fluid over an Oscillating Plate Embedded in a Porous Medium	Thermal Science	2015	19	1	183-190
24	Fazal Ghani, Taza Gul, S Islam, RA Shah, I Khan, S Sharidan, S Nasir and MA Khan	Unsteady MHD Thin Film Flow of a Third Grade Fluid over an Oscillating Inclined Belt Embedded in a Porous Medium	Thermal Science	2015	0		54-54
25	Muhammad Altaf Khan, Zulfiqar Ali, LCC Dennis, Ilyas Khan, Saeed Islam, Murad Ullah and Taza Gul	Stability Analysis of an SVIR Epidemic Model with Non-linear Saturated Incidence Rate	Applied Mathematical Sciences	2015	9	23	1145-1158
26	Muhammad Altaf Khan, Ahmad Ali, LCC Dennis, Saeed Islam, Ilyas Khan, Murad Ullah and Taza Gul	Dynamical Behavior of Cholera Epidemic Model with Non-linear Incidence Rate	Applied Mathematical Sciences	2015	9	20	989-1002
27	Muhammad Altaf Khan, Muhammad Parvez, Saeed Islam, Ilyas Khan, Sharidan Shafie and Taza Gul	Mathematical Analysis of Typhoid Model with Saturated Incidence Rate	Advanced Studies in Biology	2015	7	2	65-78
28	H Ullah, S Islam, LCC Dennis, TN Abdelhameed, I Khan and M. Fiza	Approximate Solution of Two-Dimensional Nonlinear Wave Equation by Optimal Homotopy Asymptotic Method	Mathematical Problems in Engineering	2015	2015		

29	Abid Hussanan, Ilyas Khan, Hasmawani Hashim, Muhammad Khairul Anuar, Nazila Ishak, Norhafizah M.D. Sarif and Mohd Zuki Salleh	Unsteady Mhd Flow of Some Nanofluids Past an Accelerated Vertical Plate Embedded in a Porous Medium	Journal Teknologi	2016	78	2	121-126
30	Ilyas Khan, Farhad Ali and Nehad Ali Shah	Interaction of Magnetic Field with Heat and Mass Transfer in Free Convection Flow of a Walters'-B Fluid	Eur. Phys. J. Plus:	2016	131	DOI 10.1140/epjp/i2016-16077-7	77-83
31	Arshad Khan, Ilyas Khan, Sharidan Shafiea	Effects of Newtonian Heating and Mass Diffusion on MHD Free Convection Flow Over Vertical Plate with Shear Stress at the Wall	Jurnal Teknologi	2016	78	3-2	71-75
32	Nor Athirah Mohd Ilyas Khan, Sharidan Shafiea	Numerical Solution of Unsteady Free Convection Flow in a Second Grade Fluid	Jurnal Teknologi	2016	78	3-2	89-93
33	Mukhtar M. Salah	Moments of Upper Record Values from Marshall-Olkin Exponential Distribution"	Journal of Statistics Applications and Probability An International Journal	2016	Accepted	Accepted	Accepted

Table (39) Research Papers in the Department of Basic Engineering Sciences

Conferences

No.	Authors	Article Title	Name of Conference	Year	Number	Country
1	Lim Yeou Jiann, Zulkhibri Ismail, Ilyas Khan and Sharidan Shafie	Unsteady Magnetohydrodynamics Mixed Convection Flow in a Rotating Medium with Double Diffusion	International Conference on Mathematics, Engineering and Industrial Applications 2014 (ICOMEIA 2014)	2015/5/15	Vol.1660 Pages: 050082 Publisher : AIP Publishing	Malaysia

2	Z Ismail, I Khan, AQ Mohamad and S. Shafie	Second Grade Fluid for Rotating MHD of an Unsteady Free Convection Flow in a Porous Medium	Defect and Diffusion Forum	2015/5 /6	Vol.362 Pages: 100-107 Publisher : :	
3	Zulhibri Ismail, Ilyas Khan, Nadirah Mohd Nasir, Rahimah Jusoh, Mohd Zuki Salleh and Sharidan Shafie	The Effects of Magnetohydrodynamic and Radiation on Flow of Second Grade Fluid Past an Infinite Inclined Plate in Porous Medium	The 2nd ISM International Statistical Conference 2014 (ISM-II): Empowering the Applications of Statistical and Mathematical Sciences	2015/2 /3	Vol. 1643 Pages: 563-569 Publisher : AIP Publishing	
4	Zulhibri Ismail, Ilyas Khan, Rahimah Jusoh, Nadirah Mohd Nasir, Mohd Zuki Salleh and Sharidan Shafie	Rotation Effects on Unsteady Magnetohydrodynamic Second Grade Fluid Flow in a Porous Medium Past an Infinite Inclined Plate	The 2nd ISM International Statistical Conference 2014 (ISM-II): Empowering the Applications of Statistical and Mathematical Sciences	2015/2 /3	Vol. 1643 Pages: 555-562 Publisher : AIP Publishing	
5	Hussanan Abid, Salleh Mohd Zuki, Mat Tahar Razman and Khan Ilyas	Thermal-Diffusion Effects on Mixed Convection Flow in a Heat Absorbing Fluid with Newtonian Heating and Chemical Reaction	The 2nd ISM International Statistical Conference 2014 with Applications in Sciences and Engineering (ISM-II) MS Garden Hotel, Kuantan, Pahang DM. 12-14 Ogos 2014	2015	Vol. 1643 Pages: 587 Publisher : AIP Publishing	Malaysia
6	Ilyas Khan, Abid Hussanan, Mohd Zuki Salleh and Razman Mat Tahar	Exact Solutions of Accelerated Flows for a Generalized Burgers' Fluid, I: The Case	The 4th International Conference on Computer Science and Computational Mathematics (ICCCSCM 2015), Langkawi, Malaysia	2015/7 /8	Pages: 47-52 Publisher : Science & Knowledge Research Society	Malaysia

Table (40) Research Papers in Conferences in Basic Engineering Sciences Department

Library Collection:

The College of Engineering has a library and a reading room available to both faculty members and students. This library contains 169 books with a total of 342 copies covering the academic departments of the College as follows:

Department	Number of Books	Number of Copies
Electrical Engineering	31	75
Computer Engineering and Networks	40	76
Civil and Environmental	24	37
Mechanical and Industrial	24	37
Basic Engineering Sciences	29	66
Languages	21	41
Number of books 169		Number of copies 342

Table (4) holdings of the Faculty of Engineering Library

The number of books has increased slightly in recent years to deal directly with the University's main library.

- Under the comprehensive care and continuous guidance of His Excellency Dr. Khalid bin Saad Al-Muqrin, the College of Engineering has been able to achieve a unique achievement this year by presenting congratulations to His Excellency the dean of the College of Engineering on the first patent in the field of mechanical engineering. Dr. Tareq Bagoury and Dr. Tawfiq Al Kanhal, (Assistant Professor, Department of Systems Engineering Mechatronics) have been honored for the Innovation and a patent obtained from the King Abdulaziz City for Science and Technology under the title "Special machine for cracking in water and natural gas systems"



Photo (II) College of Engineering members obtained the patent of King Abdul Aziz City for Science and Technology and presented to the rector of the University

2- The College obtained the shield of research excellence at university level for the academic year 2015/2016 AH in the field of scientific research and innovation by receiving the dean of excellence to the shield of research.

3- Honoring HE Dr. Abdul Aziz Al-Kulibi, Assistant Professor, Mechanical and Industrial Engineering Department, and Vice Dean for Graduate Studies and Scientific Research, for obtaining the distinguished research award at the university level.

4- Honoring HE Dr. Iskandar Talili from the Department of Mechanical and Industrial Engineering for the distinguished researcher award at the university level.

The effectiveness of the use of the College of engineering of technology and modern services provided by the Deanship of Information Technology:

System and Service	Percentage	Notes
D2L	100%	The college has been obtained an advance position within the final ranking of the university colleges
Committees System	% 96	All heads, secretaries, board members and committees should introduce sessions and electronically validate them
Communication Management System	%93	Most of the administrative staff, all department heads, vice-deans and the dean of the college who require their work to use the system are using it.
Maintenance and operating system	%87	Anyone who wishes to perform maintenance must submit an electronic application via the system, but the system has been discontinued for more than a month and a half
Academic edugate	%95-90	There is some delay in activating and using the new faculty members of the system
Electronic Catalog	?	No Information
Project Management System	%95	All faculty members conducting scientific research use the system

Table (42) Effectiveness of using the College of Engineering for modern technologies and services

Quality in the college of Engineering

1-Internal programs review

To prepare the programs in the college of Engineering for Academic accreditation ABET and to ensure the quality in the college, a specialized committee performed an internal review to check the all documents during three days. The committee investigated all documents, evidences and forms and the archiving process in the college. Finally, the committee presented their reports with discussions. The main comments were:

- 1- Making a unified process for documentation.
- 2- Improving the course reports contents.
- 3- Distribute the quality culture among faculty, students and administration



Figure (12) Inspect all quality work at the College of Engineering by an internal committee

2- Workshop: Standards and additional requirements of ABET accreditation

The college of Engineering organized and with support from training and development unit a workshop "Standards and additional requirements of ABET accreditation". The workshop aimed to explain the ABET international academic accreditation to faculty and their role in improving the academic programs and the way to evaluate the program outcomes



Photo (13) Workshop entitled "ABET Criteria and additional requirements"

3- Workshop: "ABET Criterion 4 in the International Academic Accreditation"



Photo (14) Workshop entitled "The fourth criteria in the international academic accreditation" ABET "

4- Workshop: "Evaluate and assess of program Outcomes"

The college of engineering organized a workshop about assessment and evaluation of educational learning outcomes. All faculty members participated in this workshop. Different experienced faculty members present the workshop from different fields.



Image (15) a workshop on measuring and evaluating the outputs of education programs in the College of Engineering

Community Service

Training courses and Bridging Programs

To serve community, the college of Engineering and with the cooperation with the Community service deanship established the bridging program in the EE department in 26\11\1434. Here, the graduated from technical colleges can participate in this program to obtain the bachelor degree in Power and Electrical machines.

Number of students now is 31 students. The students are accepted from different technical colleges:

- 1- Control and Industrial Electronics
- 2- Electrical Power
- 3- Communication and Information
- 4- Systems and Electrical machines

Conferences and Lectures to the benefit of the society

1- Students from Ibn Baz high school visited the college

A group of 24 students with a supervisor from Ibn Baz secondary school visited the college for Engineering in Wed 6\4\2017. The college provided them with the profile of the college. In addition, the college encouraged them to study hard and to have strong knowledge to join the college of engineering after finishing their school. The college explained the market needs of specialized engineers form all disciplines.



Photo (16) Students from Ibn Baz high school visited the college

2- Students from King Fahad High school in Majmaah visited the College of Engineering

A group of 27 students with a supervisor from Ibn Baz secondary school visited the college for Engineering in Tue 5\4\2017. The college provided them with the profile of the college. In addition, the

college encouraged them to study hard and to have strong knowledge to join the college of engineering after finishing their school. The college explained the market needs of specialized engineers form all disciplines.



Photo (17) Students from King Fahad High school in Majmaah visited the College of Engineering

3- Participation of College with Majmaah Charity Group

Annually, the college of engineering participates in the charity activities in the Majmaah city. In this year, the college participated in the Majmaah Charity group.

Fifth Annual Exhibition for Scientific Research and Career Day, College of Engineering

His Excellency Dr. Khalid bin Saad Al-Muqrin, the Rector of the University, patronage the fifth annual exhibition of scientific research and the engineering profession day of the College of Engineering. The exhibition attended by His Excellency the Secretary-General of the Saudi Engineering Organization Dr. Hussein Bin Yahya Al-Fadhli on Monday 4- 2016 AD on the main stage at the university campus. Several national institutions and companies participated in the exhibition: Saudi Telecom Company, the Three Spectrum Company for Electrical Products, Saudi Aircraft Preparation and Maintenance Company, Saline Water Conversion Corporation,



Photo (18): A part of the fifth annual exhibition of scientific research and the career day at the College of Engineering

Administrative, financial and technical affairs and projects

College Employees:

The number of employees in the College of Engineering in the year of the report according to administrative and technical formations 27 employees and 13 employees under item 105, bringing the total number of 40 basic staff and one employee to the owners of an external company. Three employees are still working in the office of the Undersecretary of the College of Engineering. Note that the distribution of employees in the College of Engineering according to their work and functions are shown as follows:

N	Place of Work	Number of employees
1	Dean office	2
2	Vice-dean Offices	2
3	College administration	3
4	Employees affairs	5
5	Purchasing and Stores	4
6	Students affairs	4
7	Administrative Communications	3
8	Administrative Departments	5
	Total Number	27

Table (43) distribution of employees over departments

Modern techniques in college

- 1- Register that is linked to the Deanship of Admission and Registration and it is a part of students' affairs department in the college. This program helps responsible persons to modify the reading of student data for draw-and-add purposes and to address problems related to sections timing conflicts.
- 2 -Use the communication management system, which helps to follow up administrative work and facilitate the process of completion
- 3- The use of faculty members of various systems such as: D2L system , councils and administrative communication system , operation and maintenance system, the portal of the academic system , the electronic indexing system, management system of research projects and the faculty members websites

Summary of the most important achievements, constraints and future visions of the College Achievements:

- Number of scientific researches published in the International periodicals and scientific conferences under the name of the College of Engineering at the University of Majmaah. The estimated number is 116 scientific research during the academic year 2015-2016.
- The College obtained the shield of research excellence at the university level for the academic year 2016\2016 in the field of scientific research and innovation
- Dr. Abdul Aziz Al-Kulibi from the Department of Mechanical Engineering received a distinguished research award at the university level.
- Dr. Iskandar Tlili from the Department of Mechanical Engineering received the distinguished researcher award at the university level.
- Dr. Tarek Al-Bagouri, Assistant Professor, Department of Mechanical and Industrial Engineering, and Dr. Tawfiq Al-Kanhal, Assistant Professor, Department of Systems Engineering, Mechatronics, received the Innovation Award at the University level, jointly with a patent obtained from King Abdul Aziz City for Science and Technology under the title "Cracks in water and natural gas systems"
- Dr. Abdulrahman Al-Qawasmi received the third position of the Rector's Award for Quality and Excellence at University Level



Constraints, problems, and their impact

That the College of Engineering is continuing to achieve its vision and the implementation of its mission through the goals set as a roadmap, adopted in the strategic plan in the College of Engineering. The College of Engineering adopted the enhancement of education in quantity and quality accordance with the strategic plan and objectives of the University. All this requires overcoming many challenges, both at the scientific, academic and administrative levels. These constraints can be summarized as follows:

- 1 - The weakness of the infrastructure of a college because there is no building qualified for college laboratories
- 2 - Lack of the number of faculty members with high competence in some academic disciplines
- 3 - The low academic level of some of the students
- 4- Weak support of scientific research through attending conferences and publishing in Journals

College proposals to overcome obstacles, problems, and ways to overcome them

- Attract faculty members with experience and high efficiency to meet the needs of the departments due to the increasing numbers of students in the college, especially in the Department of Civil Engineering
- Developing the infrastructure of the college in accordance with the requirements of national and international academic accreditation, especially the places of laboratories and workshops and the implementation of occupational health and safety requirements.
- Raise the level of education for students and raise their efficiency. Preparing ready engineers for production and work and positive interaction with the practical environment.
- Applying quality standards and spreading the culture of quality to become a daily work that will eventually lead to the accreditation of academic programs at the national and international levels.
- developing the study plans (Curriculum) to meet the scientific development to enhance the quality of engineering academic programs and their outcomes.
- Activate the approved academic departments through the adoption of study plans and acceptance of new students, namely the Department of Systems Engineering and Mechatronics and the Department of Architecture and Interior Design.
- Implementation of the operational plan of the College of Engineering that emanated from the strategic plan of the University according to the time period and study the implications and impact on the academic and administrative process in the College.
- Developing the administrative system in the college and upgrading the staff level to make the administrative process effective and smooth

The most important future development visions of the college

The College of Engineering is part of the university's educational body, and it is incumbent on it to work and participate in the implementation of plans for the university. In addition, through the development of future visions of the methodology of the university in the preparation and construction of the

strategic plan, which corresponds to the project horizons in the direction of expansion and quality and excellence, the College of Engineering has developed future visions according to these trends as follows:

First: Expansion:

1 - Support scientific research and increase the number and quality:

As the College of Engineering, excellence in this area as stated in the report, but the College believes that the need to expand support for scientific research and increase the number of research centers. As well, as work on the opening of graduate programs because of their positive influence on the movement of scientific research and increase its efficiency

2 - Provide students with opportunities for admission to the College of Engineering:

The College of Engineering considers the enhancing the number of accepted students is an important priority for serving the local community. It is important to note the need for a clear mechanism to improve the quality of education and its outputs

3 - Meeting future requirements and labor market needs:

The College of Engineering supports this trend by opening new academic departments such as the Department of Systems Engineering and Mechatronics and the Department of Architecture, which the College will activate. The College also considers that meeting the needs of the labor market lies in the development of curricula, the development of scientific tracks and the improvement of the educational process

Second: Raising educational and administrative efficiency:

1- Developing the creativity and excellence in the teaching staff and retaining the distinguished

2 - Developing students' skills through developing study plans and improving learning outcomes

3. Enhancing the quality of the educational content, teaching and learning and assessment methods, with innovation and diversity

4 - Improving the performance of staff and increasing their qualifications and develop their skills.

Third: Development of academic programs:

1. Enhancing the quality of academic programs and obtaining local and international accreditation

2 - Activation of continuous improvement processes and quality assurance in academic programs

Fourth: Scientific Research:

1- To activate scientific research through support and assistance in the dissemination of scientific research in scientific journals

2 - Activate the role of research centers in supporting scientific research based on scientific planning and national and global research trends

3 - Supporting the attendance of scientific conferences and participation in scientific forums

4 - Support and embrace scientific conferences in the College of Engineering

Fifth: Information Technology:

1- Supporting and encouraging faculty members to use e-learning and distance learning systems

2. Supporting faculty members with computer programs that serve the educational and research processes

3 - Automation of administrative work and quality work to save time and effort.

Main recommendations and proposals:

1- Improve the infrastructure of the College of Engineering from classrooms, laboratories and service facilities for students and develop them in accordance with the requirements of local and international bodies for academic accreditation

2 - Provide a stimulating and encouraging environment for faculty members and work to develop the skills of faculty members in the fields: teaching, research and community service

3. Encouraging scientific research and supporting outstanding scientific research

4. Provision of licensed engineering software

5 - Developing the engineering laboratories and expanding their areas of use to include scientific research and community service