



*Ministry Of Higher Education
Delta Higher Institute for Engineering & Technology*

Program Specification

Civil Engineering



Civil Engineering Department

2018-2019

A-Basic Information

- (1) Program Title: Civil Engineering
(2) Program Type: Single
(3) Department: Communications and Electronics Engineering department
(4) Coordinator: Prof. Dr./ Saad Moharram - Ass.Prof.Mahmoud Salah
(5) External Evaluator: .Prof. Dr. Zaki Zidan
(6) Last date of program specifications approval: Institute council on 30/10/2016

B-Professional Information

1. Program Aims

The mission of the civil engineering (Credit Hours) program is to provide students with a broad and thorough education in civil engineering fundamentals, applications, and design so as to prepare graduates for the practice of civil engineering at the professional level with confidence and skills necessary to meet the technical and social challenges of the future and for continuing their studies at the graduate level.

In pursuit of this mission, the educational objectives of the civil engineering program are:

- A1)** To provide a broadly based educational experience in which the essential scientific and technical elements of the engineering curriculum are integrated with the humanities and social sciences to prepare students with competencies needed for personal enrichments, career development, and lifelong learning.
- A2)** To ensure that the graduates have an understanding of the highest standards of personal and professional integrity, and ethical responsibility in the practice of civil engineering.
- A3)** To ensure that the graduates are well trained in several areas of civil engineering, such as transportation engineering, environmental and sanitary engineering, geotechnical engineering, water resource engineering, and are able to identify, formulate, and solve a wide range of civil engineering problems using modern engineering tools and techniques.
- A4)** To provide students with a major design experience involving a team approach and alternate solutions, and incorporating realistic constraints that include economic, environmental, ethical, safety, social, and political considerations.
- A5)** To developed the graduates communication skills with the society to lead and supervise the work in sites or labs using the GIS tools, appropriate building materials , codes of practice of all

civil engineering disciplines such as excavations and tunneling systems, water control structures, irrigation and water networks, sewerage systems and pumping stations.

Relationship between Attributes (Objectives) and Program Aims:

Program Aims	Attributes
A1	1, 4, 8, 10, 11
A2	5, 12, 20
A3	2, 3, 5, 17
A4	6, 9, 8, 19
A5	7, 13, 14, 15, 16, 17, 18

According to the National Academic Reference Standard issued by **NARS (2nd edition Aug. 2009)**, the program in Civil Engineering must satisfy the following Learning Outcomes.

2. Intended Learning Outcomes (ILOs)

a- Knowledge and understanding:

By the end of this program, the students will be able to:

- a.1) Define concepts and theories of mathematics and sciences, appropriate to the discipline.
- a.2) Define basics of information and communication technology (ICT).
- a.3) Demonstrate characteristics of engineering materials related to discipline.
- a.4) Describe principles of design including elements design, process and/or a system related to specific disciplines.
- a.5) Demonstrate methodologies of solving engineering problems, data collection and interpretation.
- a.6) Describe quality assurance systems, codes of practice and standards, health and safety requirements and environmental issues.
- a.7) List business management principles relevant to engineering.
- a.8) Define current engineering technologies as related to disciplines.
- a.9) Demonstrate topics related to humanitarian interests and moral issues.
- a.10) Define technical language and report writing.

- a.11) Illustrate professional ethics and impacts of engineering solutions on society and environment.
- a.12) Demonstrate contemporary engineering topics.
- a.13) Illustrate engineering principles in the fields of reinforced concrete and metallic structures' analysis and design, geo-techniques and foundations.
- a.14) Illustrate engineering principles in the fields of hydraulics and hydrology, and water resources.
- a.15) Illustrate engineering principles in the fields of environmental and sanitary engineering, roadways and traffic systems, surveying and photogrammetry.
- a.16) Describe properties, behavior and fabrication of building materials.
- a.17) Demonstrate Projects and construction management including planning, finance, bidding and contracts.

b-Intellectual skills

By the end of the program ,the civil engineering graduates must show ability to:

- b.1) Select appropriate mathematical and computer-based methods for modeling and analyzing problems.
- b.2) Select appropriate solutions for engineering problems based on analytical thinking.
- b.3) Think in a creative and innovative way in problem solving and design.
- b.4) Combine, exchange, and assess different ideas, views, and knowledge from a range of sources.
- b.5) Assess and evaluate the characteristics and performance of components, systems and processes.
- b.6) Investigate the failure of components, systems, and processes.
- b.7) Solve engineering problems, often on the basis of limited and possibly contradicting information.
- b.8) Select and appraise appropriate ICT tools to a variety of engineering problems.
- b.9) Judge engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact.
- b.10) Incorporate economic, social, environmental dimensions and risk management in design.
- b.11) Analyze results of numerical models and appreciate their limitations.
- b.12) Create systematic and methodic approaches when dealing with new and advancing technology.

- b.13) Select appropriate building materials from the perspective of strength ,durability ,weather conditions, impacts of seawater and environment
- b.14) Select and design adequate water control structures and irrigation
- b.15) Select and design adequate water networks, sewerage systems and pumping stations.
- b.16) Analyze and select codes of practices in designing all types of reinforced concrete structures.
- b.17) Analyze and select codes of practices in designing all types of metallic structures.
- b.18) Analyze and design different systems of building foundations, tunnels and excavations.
- b.19) Define, plan, conduct and report different project management techniques.

c- Professional and practical skills

The civil engineering graduates must show ability to:

- c.1) Apply knowledge of mathematics, science, information technology, design, business context and engineering practice integrally to solve engineering problems.
- c.2) Professionally merge the engineering knowledge, understanding, and feedback to improvedesign, products and/or services.
- c.3) Create and/or re-design a process, component or system, and carry out specialized engineering designs.
- c.4) Practice the neatness and aesthetics in design and approach.
- c.5) Use computational facilities and techniques, measuring instruments, workshops and laboratory equipment to design experiments, collect, analyzeand interpret results.
- c.6) Use a wide range of analytical tools, techniques, equipment, and softwarepackages pertaining to the discipline and develop required computerprograms.
- c.7) Apply numerical modeling methods to engineering problems.
- c.8) Apply safe systems at work and observe the appropriate steps to managerisks.
- c.9) Demonstrate basic organizational and project management skills.
- c.10) Apply quality assurance procedures and follow codes and standards.
- c.11) Exchange knowledge and skills with engineering community and industry.
- c.12) Prepare and present technical reports.
- c.13) Use laboratory and field equipment competently and safely.
- c.14) Observe, record and analyze data in laboratory and in the field.

c.15) Practice professionally construction management skills. Prepare technical drafts and detailed drawings both manually and using CAD.

c.16) Plan, design, construct, operate, control and carry out maintenance of all types of roadways and traffic systems.

c.17) Prepare quantity surveying reports.

d- General and transferable skills

Graduates will have an educated view of the world including:

d.1) Collaborate effectively within multidisciplinary team.

d.2) Deal with stressful environment and within constraints.

d.3) Communicate effectively.

d.4) Develop efficient IT capabilities.

d.5) Guide and motivate individuals.

d.6) Effectively administer tasks, time, and resources.

d.7) Inspect information and engage in life-long self learning discipline.

d.8) Acquire entrepreneurial skills.

d.9) Refer to relevant literatures.

3. Academic Standards

Nationally: National Academic References Standards (NARS)

The Institute adopted the NARS issued by NAQAAE in August 2009 approved by the Institute in October 2016

4. Curriculum Structure and Contents

4.a. Program duration: 179 credit hours

4.b. Program structure: Credit hours system

1) Humanities:25credit hours.

- 15 credits compulsory
- 10 credits elective.

Represent 14% of the program requirements and covers, Humanities, Social Science and general coulter courses

2) Engineering Institute Requirements: 48 credit hours

- 42 credits compulsory
 - 6 credits electives.
- Represent 26.8% of the program Requirements.

3) Department Requirements: 64 credit hours.

Represents 35.7 % of the program requirements.

4) Stream Requirements: 42 credit hours.

- 15 credits compulsory
 - 27 credits electives.
- Represents 23.5 % of the program requirements

179Credit hours

- General Requirements: 25credit hours (15 Compulsory+10 Elective)**14%**
- Institute Requirements: 48credit hours (42 Compulsory+6 Elective) **26.8%**
- Specialized courses: 64credit hours **35.7%**
- Specialized Group courses: 42 credit hours (15 Compulsory+27 Elective) **23.5%**

Practical/Field Training: the students must carry out 4 weeks of field training after the freshman year and after the sophomore year.

4.d. Modules

❖ General Culture Requirement for All Students

a- Compulsory

ALL Institute Students							Program ILOs Covered (By no.)
Institute Requirements (Compulsory)							
Code	Course Title	Cr.Hrs	Lec.	Ex.	Lab.		
HUM	011	Arabic Language	2	2	-----	-----	a10, a12, b4, c12,d9
HUM	012	English Language 1	2	1	2	-----	a10, a11, b4, c12,d9
HUM	013	English Language 2	2	1	2	-----	a5, a10, b4, c12,d9
HUM	352	Human Right	1	1	-----	-----	a7, a9, b4, d9
HUM	081	Computer Skills	2	1	-----	4	a2, a5, b1, b8, c5, c6,d1
HUM	181	Communication& Presentation	2	1	2	4	a5, a11, b3, b9, c5, c6,d1
HUM	182	Analysis & Research skills	2	1	2	-----	a5, a12, b12, c2, c3
HUM	381	Principles of Negotiation	2	2	-----	-----	a6, a12, b9,c3,d3
Total : 15 Credit Hrs.							

b- Elective (A)

ALL Institute Students							Program ILOs Covered (By no.)
Institute Requirements (Elective A)							
Code	Course Title	Cr .Hrs	Lec.	Ex.	Lab.		
HUM	X62	Music Appreciation	2	2	-----	-----	-
HUM	X71	Introduction To The History Of Civilizations	2	2	-----	-----	a6, a7, b4, c11, d9
HUM	X72	Trends In Contemporary Arts	2	2	-----	-----	a8, a12, b3, c11, d9
HUM	X73	Recent Egypt's History	2	2	-----	-----	a8, a9, b5, d9
HUM	X74	Heritage Of Egyptian Literature	2	2	-----	-----	a8, a9, b5, d9
HUM	X75	Arab & Islamic Civilizations	2	2	-----	-----	a8,a9,b5, d9
HUM	X76	Literary Appreciation	2	2	-----	-----	a8,a9,b5, d9
Select 8 Credit Hrs.							

c- Elective (B)

ALL Institute Students							Program ILOs Covered (By no.)
Institute Requirements (Elective B)							
Code	Course Title	Cr.Hrs	Lec.	Ex.	Lab.		
HUM	121	Introduction To Accounting	2	2	-----	-----	a1, a7, a8, b1, b2, c1
HUM	221	Business Administration	2	2	-----	-----	a1, a7, b1, b2, c2,d8
Select 2 Credit Hrs.							

-General Institute Requirement for All Students

a- Compulsory

ALL Institute Students							Program ILOs Covered (By no.)
Institute Requirements (Compulsory)							
Code	Course Title	Cr. Hrs	Lec.	Ex.	Lab .		
----	291	Field Training 1	1	----	----	6	a3, a5, b4, b5,c5,d1
----	391	Field Training 2	1	-----	-----	6	a3, a5, b4, b5,c5,d1
BAS	011	Mathematics1	3	2	----	----	a1, a5, b1, b3, c1,c7, d7
BAS	012	Mathematics2	3	2	----	----	a1, a3, b1, b3, c1, d7

BAS	212	Statistics & Probability Theory	3	2	-----	-----	a1, a6, b3,b8, c1, c7,d8
BAS	021	Physics 1	3	2	-----	2	a1, a3, a5, b2, b3, b4, c1, c15, d1, d3, d6.
BAS	022	Physics 2	3	2	-----	2	a1, a5, b3, b4, c5, d1, d6.
BAS	031	Mechanics	4	3	-----	----	a1, a2, b6, c3, d6.
BAS	041	Engineering Chemistry	3	2	-----	2	a1, b3, c5, d6.
CIW	331	Environmental Impact of Projects	1	1	-----	-----	a2, a4, a5, b11, c8, c9, d2.
MED	011	Engineering Drawing & Projection 1	3	1	3	3	a3, a4, b3, c4, d6
MED	012	Engineering Drawing & Projection 2	3	2	3	3	a3, a4, b3, c4, d6
MED	021	History of Engineering & Technology	1	1	-----	-----	a3, a4, b11, c11, d7
MED	022	Principles of Manufacturing Engineering	2	2	1	1	a3, a4, b4, b5, b15, c2, c3, c7, d1, d2.
IEN	314	Project Management	2	2	1	-----	a2, a3, b12, c9, d5
IEN	131	Monitoring and Quality Control	1	1		-----	a6, a7,b9, c10, d5
IEN	351	Engineering Economics	2	2	1	-----	a7, a9, b8, c10, d5.
HUM	111	Technical Report	2	1	2	-----	a10, b7, c12, d6
HUM	351	Professional Ethics	1	1	-----	-----	a9, a11, b10, c10, d8

Total : 42 Credit Hrs.

b-Elective

ALL Institute Students							Program ILOs Covered (By no.)
Institute Requirements (Elective)							
Code	Course Title	Cr.Hrs	Lec.	Ex.	Lab.		
CIS	111	Principles & Construction & Building Engineering	2	2	1	-----	a4, a8, b7, c3, d8
ARC	111	Arts & Architecture	2	2	1	-----	a4, a8, b7, c3, d9
ELP	111	Principles of Electrical Engineering	2	2	1	-----	a17, b5, c3, d7

EIE	121	Principles of Electronic Engineering	2	2	1	-----	a4, a8, b5, b6, c3, d7
MED	111	Principles of Design & Manufacturing Engineering	2	2	1	-----	a4, a8, b12, c3, d8
MEP	111	Principles of Mechanical power Engineering	2	2	1	-----	a4, a8, b12, c3, d8
Select 6 Credit Hrs.							

Special Requirement for civil Engineering

a- Compulsory

Students of civil civil Engineering Requirements (Compulsory)							Program ILOs Covered (By no.)
Code	Course Title	Cr .Hrs	Lec.	Ex .	Lab .		
BAS	111	Mathematics 3	3	2	2		a1, a4, b11, c7,d6
BAS	211	Mathematics 4	3	2	2		a1, a5, b12, c7
CIS	112	Structural Analysis 1	3	2	2		a4,a11,b1,b3 ,b17,c6,c15,d3
CIS	113	Solid Mechanics	3	2	2		a1,a13,b1,b3 ,b12,c6,d3
CIS	211	Structural Analysis 2	3	2	2		a5,a13,b1,b3,b16,c6, c15,d3
CIS	311	Structural Analysis 3	3	2	2		a5,a13,b1,b3,b16, c6,c15,d3
CIS	221	Design of Concrete Structures 1	3	2	2		a4,a13,b4,b17,c6,c8,c 15,d3
CIS	321	Design of Concrete Structures 2	3	2	2		a13,a16,b3,b17,c5,c8 ,c15,d3
CIS	231	Design of Steel Structures1	3	2	2		a4,a13,b9 ,b17,c3,c9,d3
CIS	331	Design of Steel Structures2	3	2	2		a4,a14,b9 ,b13,c5,c9,d3
CIS	141	Behavior of Materials	3	2	1	2	a3,a16,b9,b13,c2 ,c13,d3
CIS	241	Concrete Technology	3	2	1	1	a3,a8,a16,b9,b13,c1,c 2,c13,d3
CIS	151	Geology	2	2	1		a2,a3,a16,b6,b7,c5,d 2
CIS	251	Soil Mechanics	3	2	1	1	a3,a13,b2,b7,,c12,c1 3,d2
CIS	351	Foundations Engineering 1	3	2	2		a8,a15,b2,b6,b18,c12

							,c13,d7
CIS	361	Construction Management	3	2	2		a7,a17,b9, b10,b19,c1,c9,c17,d1
CIW	111	Civil Drawing	3	1	4		a4,a13,b7,c4,c15,d4, d8
CIW	112	Hydraulics	3	2	1	1	a4,a14,b7,b15,c3,c5, d1
CIW	113	Hydrology	2	1	2		a4,a9,a14,b1,b7,c3,c1 2,c14
CIW	121	Engineering Surveying	3	2	1	1	a5,a9,a15,b2,b8,c5,c1 7,d1,d4
CIW	222	Topographic Surveying and Geodesy	3	2	1	1	a5,a15,b1,b2b8,c5,c1 7,d1,d4
ARC	131	Building Construction	3	1	4		a3,a7,a8,a10,a14,a15, b4,b5,b17,c3,c11,c12 ,c14,c15,c16,d1,d2,d 3,d7
Total : 64 Credit Hrs.							

b-Minor Requirements(Compulsory)

Students of civil							Program ILOs Covered (By no.)
Minor Requirements(Compulsory)							
Code	Course Title	Cr.H rs	Lec.	Ex .	Lab .		
CIW	211	Irrigation Network Engineering	3	2	2	-----	a4,a14,b15,c2,c12,c16
CIW	231	Environmental Engineering	3	2	2	-----	a6,a10,a12,b13,c11,c1 4
CIW	341	Highway Engineering	3	2	2	-----	a3,a11,a16,b9,b19,c1 1,c16,d6
Select 9 Credit Hrs.							

a-Elective (A)

Students of civil							Program ILOs Covered (By no.)
Civil Engineering Requirementsminor (Elective A)							
Code	Course Title	Cr.H rs	Lec.	Ex .	Lab .		
CIS	411	Structural Dynamics	3	2	2	----	a1,a5,a9,b6,b10,c5,c7
CIS	322	Design of Wall Bearing Structures	3	2	2	----	a11,a13,b6 ,b15,c8,c10,
CIS	421	Design of Concrete Structures 3	3	2	2	----	a12,a16,b8,b16,c7 ,c15,d3

CIS	431	Design of Bridges	3	2	2	----	a5,a12,a16,b11,b14,c5,c16
CIS	432	High Rise Buildings	3	2	2	----	a1,a2,a11,b1,b5,b9,c3,c5
CIS	341	Repair & Strengthening of Structures	3	2	2	----	a8,a9,a10,a12,b1,b5,b9,c6,c12,c16,d7
CIS	451	Foundations Engineering 2	3	2	2	----	a9,a14,b9,c7,c13,d7
CIS	461	Construction Engineering	3	2	2	----	a7,a10,a17,b6,c1,c9,d2
CIS	311	Design of Irrigation Structures	3	2	2	----	a4,a14,b2,b11,c4
CIS	321	Maps, GIS & Remote Sensing	3	2	1	1	a5,a10,a12,a15,b2,c1,c6,c14,d4
CIS	332	Sanitary Engineering	3	2	2	----	a6,a12,a13,b2,b18,c3,c10,d5
CIS	441	Transportation Engineering	3	2	2	----	a5,a15,b2,b19,c11,c16,d6
CIS	451	Harbor Engineering	3	2	2	----	a4,a10,a11,a13,b7,16,c3,c11
CIS	452	Pavement Engineering	3	2	2	----	a3,a15,b9,b12,c16,c17
Select 24 Credit Hrs.							

b-Elective (B)

Students of civil							Program ILOs Covered (By no.)
Civil Engineering Requirements minor (ElectiveB)							
Code	Course Title	Cr.Hrs	Lec.	Ex.	Lab.		
CIS	491	Project	3	2	10	----	a4,a13,a14,a15,b1,b2,b4,b17,c6,c12,d1,d2,d7
CIW	491	Project	3	2	10	----	a4,a13,a14,a15,b1,b2,b4,b17,c6,c12,d1,d2,d7
Select 6Credit Hrs.							

4. e. Indicative curricula Content by Subject Area

Indicative curricula content by subject area

	Subject Area	%	Tolerance
A	Humanities and Social Sciences (Univ. Req.)	11.3	9-12 %
B	Mathematics and Basic Sciences	23.5	20-26 %
C	Basic Engineering Sciences (Faculty/Spec. Req.)	22.4	20-23 %
D	Applied Engineering and Design	23.5	20-22 %
E	Computer Applications and ICT	9	9-11 %
F	Projects and Practice	10.3	8-10 %
	Subtotal	100	92-94 %
	Total	100	100%

Practical/Field Training: the students must take two field training.

4. Program admission requirements

Having Egyptian Secondary education or equivalent certificate with major in Mathematics, then after passing the preparatory year and fulfilling the admission requirements the students will be able to join the department upon his desire.

5. Evaluation of students performance in courses

Student performance is evaluated through mid-term exam, Final exam, oral and/or practical exam and semester works. The student must achieve 50% of the total mark and 25% of the final exam. 50% of the graduation project mark is assigned to semester work and 50% is assigned to the final discussion and report.

Student performance is evaluated according to the following table:

Method of Evaluation	Evaluated ILOS
Written exams including short quizzes	Knowledge Skills , Intellectual Skills
Oral exams including those taken during laboratory hours	Knowledge Skills , Intellectual Skills
Assignments and course term work	Knowledge Skills , Intellectual Skills, Professional Skills, General and Transferable Skills
Mini projects (single student or team work)	Professional, Practical Skills, General and Transferable Skills

Continuous Assessments	Intellectual Skills, General and Transferable Skills
Practical Work (designing, building up, or simulating circuits)	Professional, Practical Skills, General and Transferable Skills
Graduation Projects (single student or team work)	Professional, Practical Skills, General and Transferable Skills

6. Regulations for progression and program completion.

The Study in acceding to the semesters systems when the academic year in divided to 3 semesters:

- First semester, starting September and extends for 15 weeks.
- Second semester, starting in February and extend for 15 weeks.
- Summer semester, starts in July for 7 weeks; the hours is doubled.

i. The study is divide into levels :

Level	name	Number of gained credits
0	Freshman	>0and < 30
1	sophamde	>30and < 65
2	junior	>65and <= 100
3	Senoia -1	>100and <=135
4	Senoia -2	>135and <=179

Rules of Registrant, Add/drop course

- 1- New students can enroll in 18 credits maximum for the first and second semester and not less than 15 hours.
- 2- Students can enroll in 6 credits maximum in the summer semesters, under some condition can enroll in more than six hours but with maximum 3 courses.
- 3- Student can add / drop courses during the first two weeks
- 4- Student can enroll in maximum of 21 credit if his GPA is more than 3
- 5- Students, whose GPA is less than 1 can enroll 12 hours maximum.

6- Student, can drop course till the 3rd week for basic semester and up to the second week for the summer semester and after that date, he withdraws of the course.

7- Students on probation can enroll in courses, he studied before and got grade C or less than consider the latest grade with a maximum of B

8- Student who takes grade F course has to study it again and take exam and consider the new grade with a maximum of B grade.

9- Student is considered an academic monitoring if his GPA is less than 2 at the end of any semester.

11- Student take exam at the end of each semester, and he is forbidden from attending the final exam if he is absent from attending lectures and tutorial more 25% from the total hours. the weight of the final written exam must be more than 50% from the total mark.

ii. Grading system

Grade	Points	Percent
A	4.0	95% and more
A-	3.7	From 90% to less than 95%
B+	3.3	From 85% to less than 90%
B	3.0	From 80% to less than 85%
B-	2.7	From 75% to less than 80%
C+	2.3	From 70% to less than 75%
C	2.0	From 65% to less than 70%
C-	1.7	From 60% to less than 65%
D+	1.3	From 55% to less than 60%
D	1.0	From 50% to less than 55%
F	0.0	less than 50%

iii. Grade for special cases :

Withdraw	W
Passing and exam	P
Not fulfilling pre- request	NP

❖ **Filed training:**

Students must take practical training during the summer two times during his study for a period not less than 4 weeks in one of the industrial organization relevant to his specialization.

Training is monitored by the academic advisor and the student training is evaluated and takes into his academic record.

❖ **GPA calculation**

The GPA is calculated as the follows:

- Points for each course is calculated as the number of the hours multiplied by the point of the course grade.
- Total points of the semester in the sum of the points of the courses registered in this semester
- Semester GPA is calculated as the division of the total hours' semester points by the total registered.
- Accumulated GPA in Calculated as The division of all courses points by total number of credit hours of these courses.
- Honorary Grade is gives to the student whose GPA didn't decreased of 3.30 during all the semester and didn't fail in any course.
- Student must take the pre-request courses before enrolling in the course.

❖ **Transfer students**

-Students can study some courses in another university after getting the approval from the institute council and the ministry of higher education and is accounted for the graduation but not in the GPA for a maximum of 30 credits.

❖ **Firing cases**

Student is excluded from the study in any of the following cases:

- i. If he couldn't raise his GPA to more than 1.5 out of 4 at the end of the 4th semester after joining the institute.
- ii. Student whose GPA is less than 1.7 out of 4 after his successive semester on 8 dispensed semester.
- iii. Students who couldn't finish his study after 16 semesters.

Institute council can study the cases of students subject to decision for them after approval of the ministry of higher education.

8- Evaluation of program

Evaluator	Tool	Sample
1-Senior students	Evaluation sheet	80
2-Alumni	Evaluation sheet & interview	50
3-Stakeholders (Employers)	Evaluation sheet & interview	7
4-External Evaluator(s)	Evaluation sheet	1
5-Other		

Program coordinator:

Signature

Date

Ass.Prof.Mahmoud Salah

September 2018

Head of Department:

Signature

Date

Prof. Dr. Saad Moharram

September 2018