

## Programme Report Academic year 2013 / 2014

University: Minoufia UniversityFaculty: Faculty of EngineeringDepartment: Civil Engineering

## **A- BASIC INFORMATION:**

1. Programme Title	Civil Engineering
2. Specialization	Civil Engineering (general)
3. Programme Duration	5 years
4. No. of Credit hours/ No. of Courses	( 161 ) Theoretical $+$ (139 ) Practical $=$ <b>300</b> hours
5. Policy for constitution of examiner	Department Board
boards	
6. External Examiners system	Available Unavailable

## **B-PROFESSIONAL INFORMATION**

7. Statistics:			
-No. of Students enrolled in the programme		220	
- Percentage of students passing the programme (%)		96.36 %	
- Trend of Joining the programme	Increasing <a> <a> <a> <a> <a> <a> <a> <a> <a> <a></a></a></a></a></a></a></a></a></a></a>		
(According to the No. of students	Constant		
Joining the programme in last three years ):	Decreasing		
Final exam results:			
Grading: No. and percentage in each	Excellent	20	9.09 %
grade	Very Good	100	45.45 %
	Good	68	30.91 %
	Passable	7	3.18 %
	Pass	25	11.36 %

8. Academic Standards:				
-Achievement of Program Intended Learning Achieved				
Outcomes				
- Academic Refe Standards	rence		NARS	
Knowledge and Understanding	Engineering	A.1) Concepts and theories of mathematics and sciences, appropriate to Civil Engineering. A.2) Basics of information and communication technology (ICT) A.3) Characteristics of engineering materials related to Civil Engineering. A.4) Principles of design including elements design, process and/or a system related to Civil Engineering. A.5) Methodologies of solving engineering problems, data collection and interpretation A.6) Quality assurance systems, codes of practice and standards, health and safety requirements and environmental issues. A.7) Business and management principles relevant to engineering. A.8) Current engineering technologies as related to Civil Engineering. A.9) Topics related to humanitarian interests and moral issues. A.10) Technical language and report writing A.11) Professional ethics and impacts of engineering solutions on society and environment A.12) Contemporary engineering topics.		
	Civil Engineering	A.13) Engineering principles in the fields of reinforced concrete and metallic structures' analysis and design, geodetics and foundations, hydraulics and hydrology, water resources, environmental and sanitary engineering, roadways and traffic systems, surveying and photogrammetry  A.14) Properties, behavior and fabrication of building materials  A.15) Projects and construction management including planning, finance, bidding and contracts		
- Intellectual Skills :	Engineering	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, societal, and environmental and risk management dimensions in design.  B.11) Analyze results of numerical models and assess their limitations.		

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		B.12) Innovate systematic and methodic approaches when dealing with new		
		and advancing technology.  B.13) Select appropriate building materials from the perspective of strength,		
		durability, suitability of use to location, temperature, weather conditions and		
		impacts of seawater and environment		
		B.14) Select and design adequate water control structures, irrigation and water		
	Civil	networks, sewerage systems and pumping stations		
	Engineering	B.15) Analyze and select codes of practices in designing reinforced		
		engineering concrete and metallic structures of all types. Determine the levels,		
		types and design systems of building foundations, tunnels and excavations		
		B.16) Define, plan, conduct and report management techniques		
		B.17) Assess and evaluate different techniques and strategies for solving engineering problems		
- Professional		C.1) Apply knowledge of mathematics, science, information technology,		
- Professional		design, business context and engineering practice integrally to solve		
and Practical		engineering problems.		
		C.2) Professionally merge the engineering knowledge, understanding, and		
Skills:		feedback to improve design, 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, analyze		
		and interpret results.		
	Engineering	C.6) Use a wide range of analytical tools, techniques, equipment, and software		
		packages pertaining to Civil Engineering and develop required computer		
		programs.		
		C.7) Apply numerical modeling methods to engineering problems.		
		<ul><li>C.8) Apply safe systems at work and observe the appropriate steps to manage risks.</li><li>C.9) Demonstrate basic organizational and project management skills.</li></ul>		
		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		
	Civil	technical drafts and detailed drawings both manually and using CAD		
	Engineering	C.16) carry out maintenance of all types of roadways and traffic systems		
		C.17) Prepare quantity surveying reports		
		C.18) Plan, design, constructs, operate, control and carry out maintenance of all types of roadways and traffic systems.		
Conoral		D.1) Collaborate effectively within multidisciplinary team.		
General and	Engineering	D.1) Conaborate effectively within mutidisciplinary team. D.2) Work in stressful environment and within constraints.		
Transferable	Engineering	D.3) Communicate effectively.		
	Civil	D.4) Demonstrate efficient IT capabilities.		
Skills:	Engineering D.5) Lead and motivate individuals.			
		D.6) Effectively manage tasks, time, and resources.		
		D.7) Search for information and engage in life-long self learning discipline.		
		D.8) Acquire entrepreneurial skills.		
		D.9) Refer to relevant literatures.		
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		Assign a portion of the office hours for those students.
- Methods of	For low	Give them specific tasks.
Supporting the	capacity	Repeat the explanation of some of the material and tutorials.
Low- Capacity – students		Assign a teaching assistance to follow up the performance of
Students and		this group of students.  Hand out project assignments to those students.
outstanding	For outstanding	Give them some research topics to be searched using the
students:	Students	internet and conduct presentation.
		Encourage them to take parts in the running research projects.
-References	Assessment	
standards for the program:		NARS
- Guidebook for the program :		Available Unavailable
	sion system for	Available
the program:		Unavailable
		Yearly
		More than year
- Adequacy of	the program	The Civil Department has a variety of staff in diverse
academic Structur	re With the	specifications that cover all the necessary teaching and training
outcomes :		efforts to achieve the ILOs of the program. This is dynamically
		changing according to accepted number of students and the
		number of staff on special leave.
- Management an	d organization	Official leaves of staff enforced by laws may present a staff
defects:		deficiency in some specialization in the program.

9. Students assessment to measure the achievement of the Intended learning outcomes (ILOs)	
- Assessment Tools :	Written examinations     Oral examinations
	3. Practical examinations
	4. Class work
	5. Laboratory work
	J. Laboratory work

	<b>6.</b> Quizzes
- Schedules :	1. End of term
	2. End of term
	3. Around End of term
	4. Along the course
	5. At selected timing
	<b>6.</b> Quizzes as selected timing
- External reviewer	
- Comments ( if any ):	
10- Learning resources:	
- Ratio of department members to	No. and ratio of faculty members and their
students:	assistants to student: 45/845 5.4 %
	Almost (1 staff for 19 students)
- Matching of department members	Adequate
specialization to program needs:	Adequate to some extent
	Inadequate (Why?)  Drop in some specializations (due to official
	leaves), remedial through assigning similar
	specialization for teaching.
- Adequacy of library :	Adequate
racquacy of notary.	Adequate to some extent
	Inadequate (Why?) □
	To be updated with new references
- Adequacy of laboratories :	Adequate
	Adequate to some extent
	Inadequate (Why?) Under continuous upgrade
	Onder continuous apgrade
- Adequacy of computer facilities :	Adequate
	Adequate to some extent
	Inadequate (Why?) □
	Department has its own computer lab fairly equipped
- Extent of cooperation with industry	and requires periodical upgrade  Through faculty management (still need
-	improvement)
and business community in	

providing training opportunities for	
students:	
- Any other program needs :	Making available more educational space\ rooms
11- Quality management and de	velopment
- Follow up system for defects sides.	Effectual
	Effectual to some extent
	Ineffectual (Why?) ■
- Effectiveness of faculty and	Adequate
University laws and regulations:	Adequate some extent
	Inadequate (Why?) □
	List any inadequacies
	Through internal faculty procedures
- Effectiveness of internal revision	
system in development the program :	Fairly Effective through continuous communications
system in development the program.	
- Comments of external reviewers in	
respect to the program ILOs and	Attached
assessment standards	

12- Proposals for program development		
-Programme Structure	New Bulletin (Layha) was prepared for the	
(Courses/hours)	department under approval	
- Courses , deletions and additions	Included in new Bulletin	
and modifications		
- Training and Skills	Extend training with other stakeholders	
- Stakeholders recommendations	Verbal Contacts with some of current stakeholders to	
for development of the	be transformed into written recommendations	
programme		
- Preson responsible	Department Head	

-	Completion date	One academic year

Coordinator of Program Quality Assurance Committee	Head of Civil Dept. Council
Prof. Magdy Tayel	Prof. Mahmoud Elsheikh
14\ 12 \ 2014	14\ 12 \ 2014

Programme Coordinator:	Head of Department:
Signature:	Signature :
Date:	Date: