

**Civil Engineering
Department
at
CAIRO UNIVERSITY**

Civil Engineering Department

Structural Engineering (STR)

Structures

Materials

Steel

Reinforced Concrete

Construction

Irrigation and Hydraulics (IHD)

Irrigation

Hydraulics

Harbor & Coastal

Public Works (BPW)

Soil Mech. & Found

Highway & Airports

Transportation

Railways

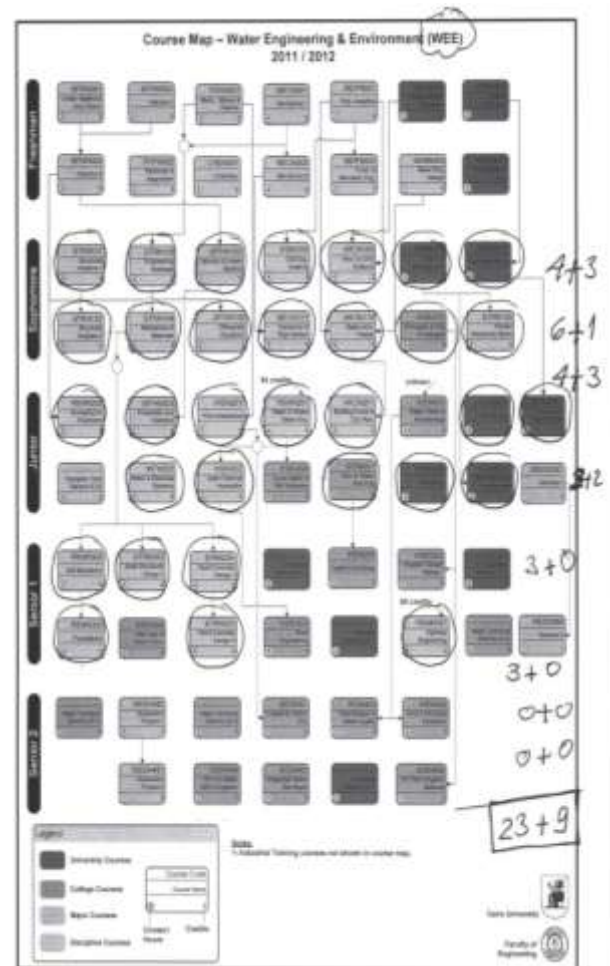
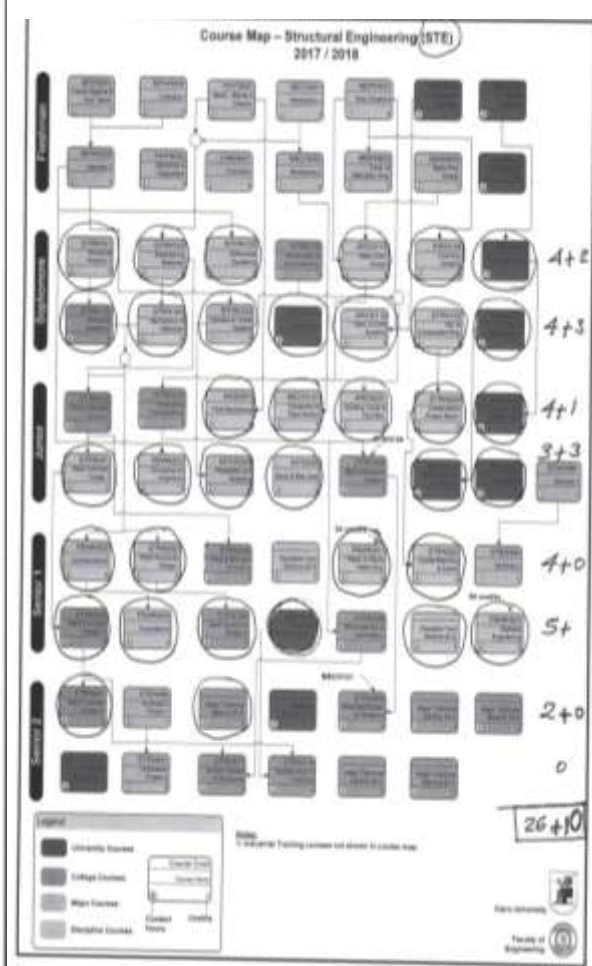
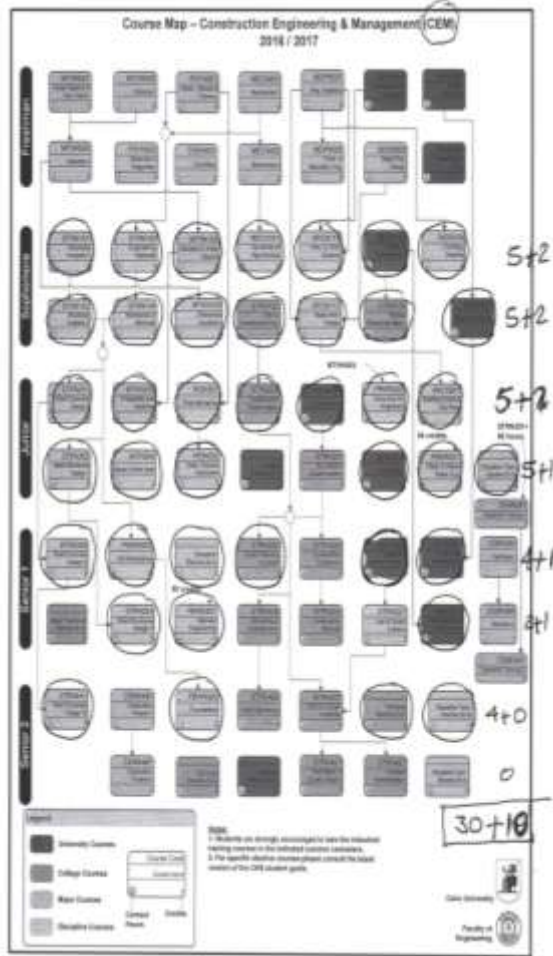
Sanitary

Survey

CEM
2006

STE
2008

WEE
2009



**Construction
Engineering And Management
Program
(CEM)**

Introduction:

- Construction is one of the largest and most important industries in the world.
- Construction sector represents over 11% of the total Egyptian workforce.
- Its share in the total National Gross Income approaches 8%.
- Construction engineering and management is obviously critical to the development of civil infrastructure.
- The program will train the students in construction management ; a multidisciplinary field that integrates engineering, technology and management of people and physical resources.

Mission:

- to cope with the new advances in the field of construction Engineering
- to provide a well-integrated program that gives the student the opportunity to develop the proficiencies necessary for a successful professional career in construction industry.

Educational Objectives:

To Provide the graduates with:

- The ability to review the contract strategies, appropriate contract forms, and payment methods.
- Appropriate technical proficiency in producing tender and contract documents.
- Appropriate technical proficiency in supervising constructions projects and monitoring their progress.
- Excelling graduates capabilities in advising clients on settling claims and disputes

Sample Study Plan: (CEM Program)

Since the program is credit hours based curriculum, student does not have to take the courses during the semester/level indicated as long as prerequisites of a particular course are fulfilled and, of course, the course is offered

Course Map – Construction Engineering & Management

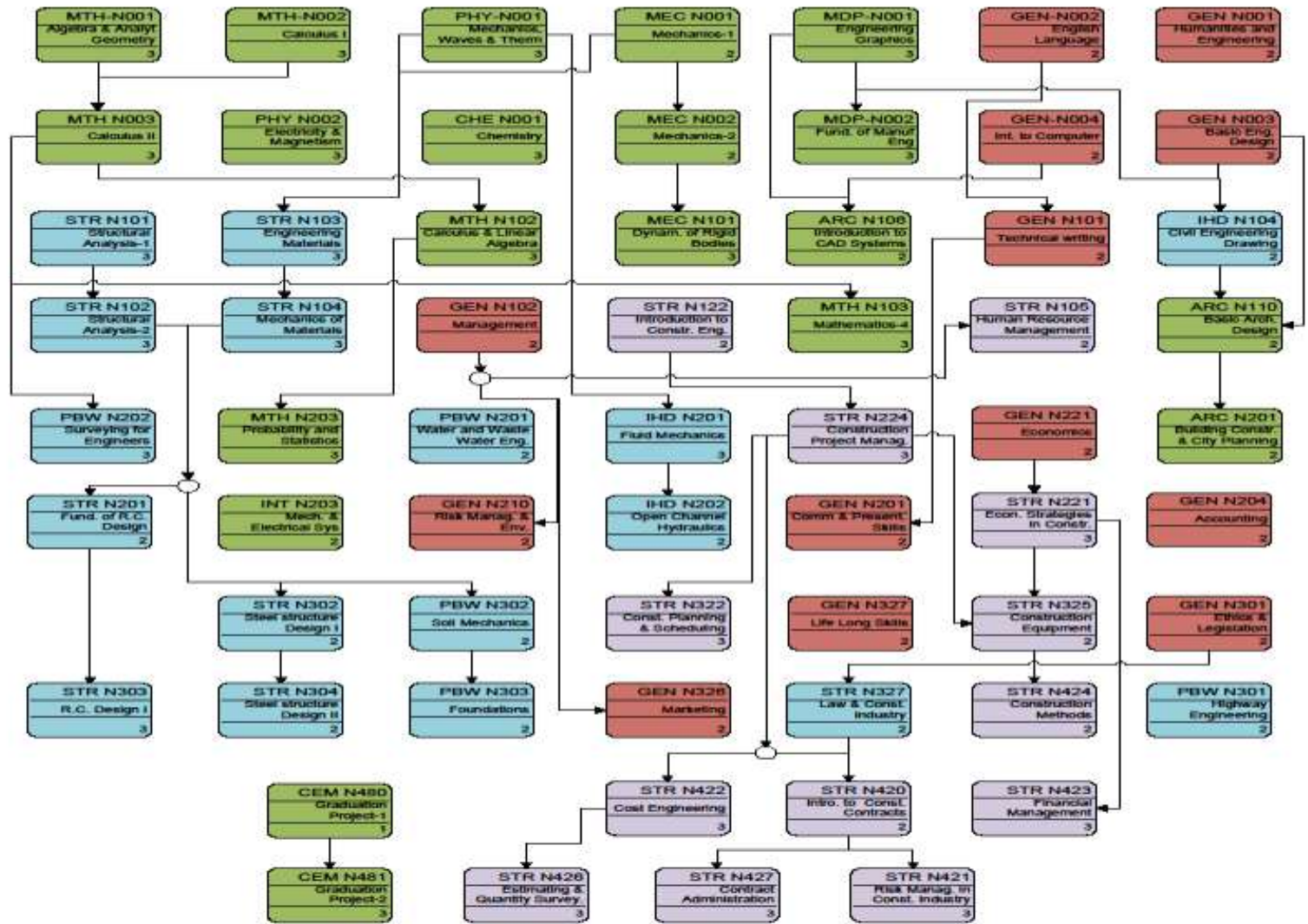
Freshman

Sophomore

Junior

Senior I

Senior II



Legend

- University Courses (Red box)
- College Courses (Green box)
- Major Courses (Blue box)
- Discipline Courses (Purple box)

Course Code
Course Name
Credit Hours

Notes:
 1- Elective, seminar and industrial training courses not shown. Refer to student guide for prerequisites.

	Code	Course Title	Credits	Group
1	GENN301	Ethics and Legislation ⁽¹⁾	2	E-1 ⁽¹⁾
2	GENN310	Advanced Risk Management	2	
3	GENN311	Technical Writing in Arabic	2	
4	GENN321	Foreign Language	2	
5	GENN326	Marketing	2	
6	GENN327	Selections of Life-long Skills	2	
7	GENN331	Business Communication	2	
8	GENN332	Service Management	2	

Remarks:

(1) Student selects *three (3) courses* equivalent to 6 credits; *one of these courses should be GENN301*

	Code	Course Title	Credits	Group
1	ARCN211	Urban Planning	2	E-2 ⁽¹⁾
2	GENN341	Operation Research	2	
3	GENN342	Decision Support System	2	
1	IHDN301	Introduction to Water Resources Engineering	3	E-3 ⁽²⁾
2	PBWN343	Transportation and Logistic Management	3	
3	STRN341	Masonry Structures	3	

Remarks:

(1) Student selects *one (1) course from group E-2* equivalent to 2 credits

(2) Student selects *one (1) course from group E-3* equivalent to 3 credits

	Code	Course Title	Credits	Group
	1	STRN342 Project Resources Management	3	E-4 ⁽¹⁾
	2	STRN344 Construction Material and Quality Control	3	
	3	STRN447 Strategic Planning	3	
	4	STRN464 Sustainability and Public Policy in the Construction Industry	3	
	1	STRN423 Financial Management	3	E-5 ⁽²⁾
	2	STRN443 Temporary Structures and Form Work Design	3	
	3	STRN444 Special Concrete Structures	3	
	4	STRN452 Information Technology in Construction	3	
	5	STRN454 Special Problems in Construction	3	
	6	STRN455 Feasibility Studies and Project Evaluation	3	E-6 ⁽³⁾
	9	STRN465 Inspection and Maintenance of Structures	3	
	1	PBWN342 Ground Water Control Systems	3	
	2	PBWN446 Deep Excavation and Side Support	3	
	3	STRN445 Steel Structures Design III	3	
	4	STRN448 Quality and Safety Management	3	
	5	STRN449 Organization Management	3	
	6	STRN453 Project Specifications and Bids	3	
	7	STRN456 Claims In Construction Industry	3	
	8	STRN463 Building Information Modeling	3	

Remarks:

(1) Student selects *one (1)* course from group E-4 equivalent to 3 credits

(2) Student selects *two (2)* courses from group E-5 equivalent to 6 credits

(3) Student selects *two (2)* courses from group E-6 equivalent to 6 credits

Employment Chances:

- Site Engineer; supervision, site technical office, contract administration, Project Engineer, Project Manager.
- Head office: contract Administration, structural designer, Project Engineer, Project Manager,
- Employer: Owner, Contractor, Consultant.
- Employment of CEM graduates over the past 5 years \approx 100% (average 2 months delay)

BEST WISHES

FROM CEM

Prof. Dr. Nabil AB Yehia

Prof. Dr. Hatem Mostafa

Dr. Hesham Osman

Dr. Omar Alanwer