

## Annual Report for B. Sc. Construction and Building Engineering Program

### Academic Year 2023-2024

**Institute:** High Institute of Engineering – 6<sup>th</sup> October City  
**Department:** Construction and Building Engineering

### A-Basic Information

- (1) **Program Title:** B. SC Construction and Building Engineering Program
- (2) **Program Specialty:** Construction and Building Engineering
- (3) **Program duration:** 10 semesters (5-Levels)
- (4) **Program structure:** Credit hours system

- i. No. of Credit hours: **180**      Lectures /**123**      Tutorial/Exercises/**133**
- ii. No. of Contact hours: **256**      Compulsory/ **168**      Elective / **12**
- iii. No. of Credit hours for Humanities and Social Sciences (institute. Req): **17**
- iv. No. of Credit hours for Mathematics and Basic Sciences : **44**
- v. No. of Credit hours for Basic Engineering Science (Spec. Req) : **38**
- vi. No. of Credit hours for Applied Engineering and Design : **37**
- vii. No. of Credit hours for Computer Application ICT : **17**
- viii. No. of Credit hours for Project and Practical : **16**
- ix. No. of Credit hours for Discretionary (Institution Character-Identifying): **11**

	Subject Area	Hours	%	Tolerance
A	Humanities and Social Sciences (Univ. Req.)	17	9.44	9–12 %
B	Mathematics and Basic Sciences	44	24.5	20–26 %
C	Basic Engineering Sciences (Faculty/Spec. Req.)	38	21.1	20–23 %
D	Applied Engineering and Design	37	20.5	20–22 %
E	Computer Applications and ICT	17	9.5	9–11 %
F	Projects and Practice	16	8.9	8–10 %
	<b>Subtotal</b>	169	93.9	92–94 %
G	Discretionary (Institution character-identifying)	11	6.1	6–8 %
	<b>Total</b>	180	100	100%

(5) **External reviewing system of exams:** The Construction and Building Engineering program has nominated 3 staff member as external examiners to carry out the evaluation of the final exams at the end of each semester, with special focus on the width and depth of the course content and engineering applications according to a check list of evaluation.

(6) **Last date of program specifications approval:** Institute council on January 2018

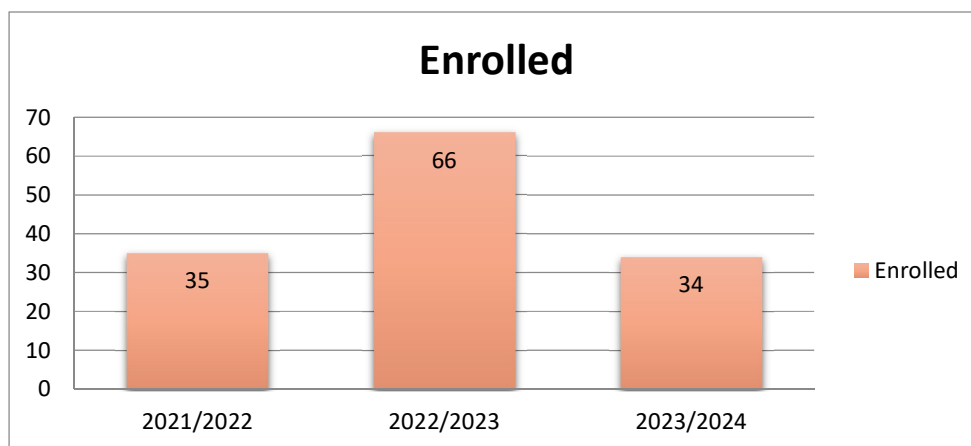
## B. Professional Information

### Statistics:

1. No. of students enrolled in the program:

No. of students enrolled in the program this year to those who enrolled in the previous years:

2021 / 2022	2022 / 2023	2023 / 2024
35	66	34



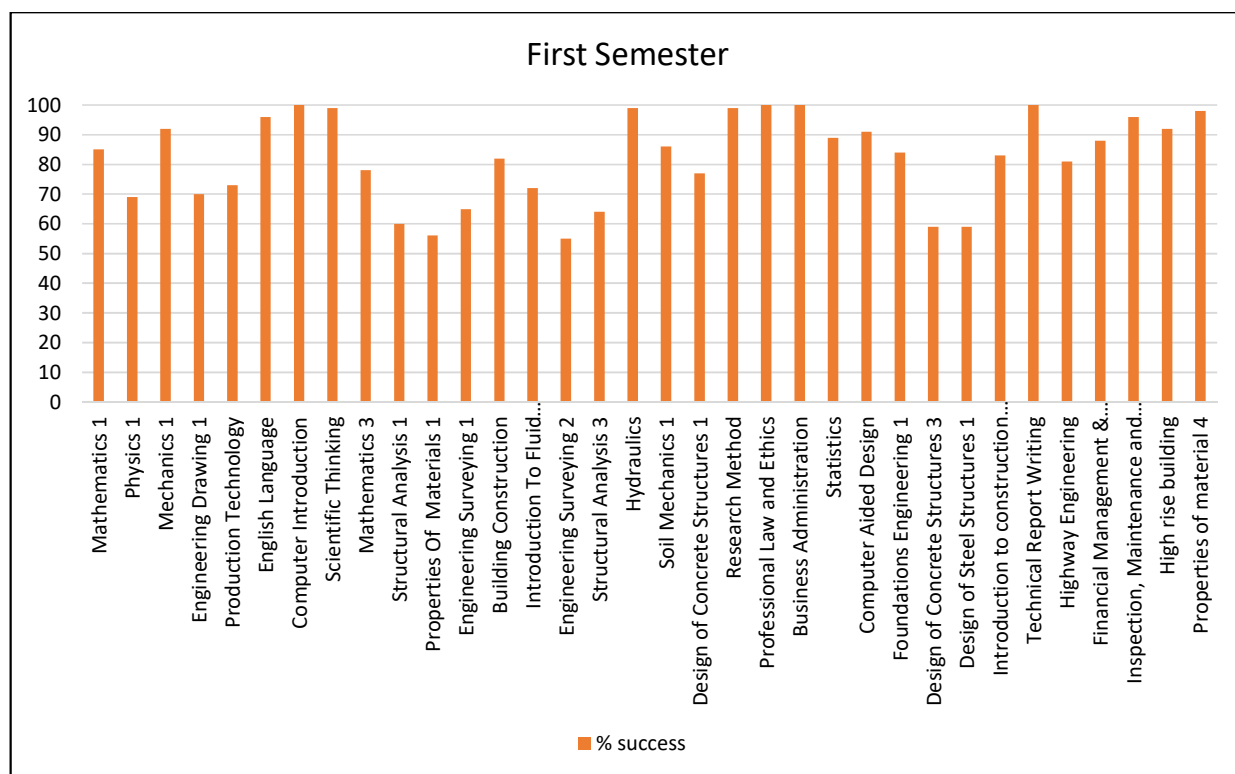
## 2. Regarding First Term:

Number of students enrolled in the courses that offered in the **First semester** with the percentage of success are given in the following table:

#	Level	Code	Course Name	Grades												No. of Student	Success%
				A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F		
1	Freshman ( 000 )	BAS001	Mathematics 1	0	0	3	8	9	11	12	8	6	5	12	14	91	85%
2		BAS002	Physics 1	0	2	1	6	7	5	7	11	3	6	15	31	99	69%
3		BAS003	Mechanics 1	2	4	10	12	16	17	7	7	9	4	1	8	100	92%
4		MTE001	Engineering Drawing 1	2	5	10	9	4	11	6	9	5	3	11	34	115	70%
5		MTE011	Production Technology	0	0	1	6	11	6	4	13	7	7	13	26	97	73%
6		HUM001	English Language	4	11	13	27	12	7	4	0	3	3	4	4	96	96%
7		ICE001	Computer Introduction	3	18	31	13	8	2	3	4	2	1	2	0	92	100%
8	( Sophomore ) 100	HUM103	Scientific Thinking	0	2	3	3	6	10	1	4	6	3	2	1	41	99%
9		BAS101	Mathematics 3	2	0	0	0	1	1	0	0	1	3	25	13	46	72%
10		CBE 101	Structural Analysis 1	2	5	2	0	1	1	3	1	0	5	2	17	42	60%
11		CBE109	Properties Of Materials 1	0	1	2	1	2	3	1	0	3	2	10	22	49	56%
12		CBE 102	Engineering Surveying 1	1	0	1	2	1	3	2	2	4	4	5	14	40	65%
13		CBE 103	Building Construction	0	1	2	2	4	5	1	3	3	6	8	8	43	82%
14		CBE 110	Introduction To Fluid Mechanics	1	0	3	3	3	5	2	3	3	3	6	13	46	72%

#	Level	Code	Course Name	Grades												No. of Student	Success%
				A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F		
15	( Junior ) 200	CBE 201	Engineering Surveying 2	0	0	0	1	1	3	3	4	7	3	17	33	72	55%
16		CBE 202	Structural Analysis 3	0	1	0	2	2	2	6	3	2	4	7	17	47	64%
17		CBE 203	Hydraulics	6	2	8	13	6	5	2	2	2	3	1	1	51	99%
18		CBE 204	Soil Mechanics 1	0	0	1	7	3	6	7	5	8	2	8	8	55	86%
19		CBE 205	Design of Concrete Structures 1	0	1	0	1	4	3	5	6	5	4	8	12	51	77%
20		HUM 207	Research Method	0	0	0	4	3	15	8	5	1	3	1	0	40	100 %
21		HUM 206	Professional Law and Ethics	0	0	7	20	11	7	7	3	3	0	0	0	58	100 %
22	( Senior - 01 ) 300	HUM 308	Business Administration	0	14	18	7	6	2	0	1	0	0	0	0	49	100%
23		BAS 302	Statistics	0	1	1	3	3	4	4	3	10	4	9	6	55	89%
24		CBE 301	Computer Aided Design	2	5	4	7	9	5	1	6	3	2	1	5	52	91%
25		CBE 302	Foundations Engineering 1	0	1	4	6	6	8	4	5	2	5	6	10	59	84%
26		CBE 303	Design of Concrete Structures 3	0	0	0	1	4	2	3	4	6	3	15	29	70	59%
27		CBE 304	Design of Steel Structures 1	1	2	1	3	2	3	3	5	2	2	4	27	53	59%
28		CBE 305	Introduction to construction Management	0	1	5	9	6	8	3	4	3	4	3	10	56	83%
29	( Senior - 02 ) 400	HUM 410	Technical Report Writing	0	12	24	28	11	4	5	0	0	1	0	0	86	100%
30		CBE 401	Highway Engineering	1	1	6	10	10	10	8	6	13	6	9	20	104	81%
31		CBE 402	Financial Management & Accounting	6	12	11	9	12	9	9	2	4	2	12	13	104	88%
32		CBE 403	Inspection, Maintenance and Repair of Structures	5	7	14	14	12	12	5	8	1	8	2	4	92	96%

#	Level	Code	Course Name	Grades												No. of Student	Success%
				A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F		
33		CBE 424	High rise building	5	8	17	20	13	11	5	2	2	3	6	9	103	92 %
34		CBE 420	Properties of material 4	0	0	1	20	17	23	14	5	8	2	4	2	96	98 %
<b>Total</b>				<b>43</b>	<b>117</b>	<b>204</b>	<b>277</b>	<b>226</b>	<b>229</b>	<b>155</b>	<b>144</b>	<b>137</b>	<b>116</b>	<b>229</b>	<b>411</b>		



### Analysis of Significant Results or Variations:

In this section, a list of courses where completion rates, grade distribution, or trends are significantly skewed, high or low results, or departed from policies on grades or assessments. For these courses, the reason for the significant result, and what action has been taken.

#	Course Name	Significant result or variation	Action taken
1	Properties Of Materials 1	56 % success	N/A
2	Engineering Surveying 2	55 % success	
3	Design of Concrete Structures 3	59 % success	
4	Design of Steel Structures 1	59 % success	

### 3. Regarding Second Term:

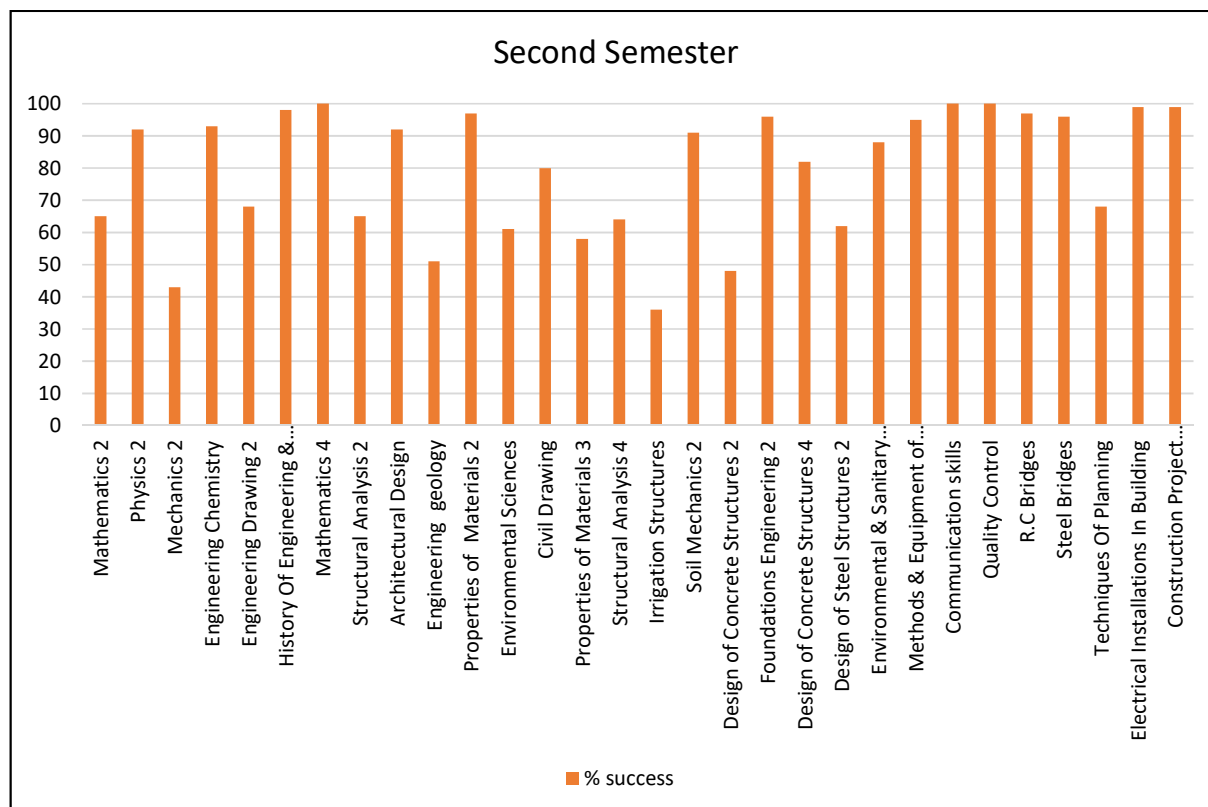
Number of students enrolled in the courses that offered in the **Second semester** with the percentage of success is given in the following table:

#	Level	Code	Course Name	Grades												No. of Student	Success%
				A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F		
1	Freshman ( 000 )	BAS006	Mathematics 2	0	0	0	2	4	5	5	6	6	9	17	29	83	65%
2		BAS007	Physics 2	0	0	0	1	8	18	14	14	10	7	11	7	90	92%
3		BAS008	Mechanics 2	0	0	0	2	4	3	5	7	5	10	23	89	156	43%
4		BAS009	Engineering Chemistry	0	0	0	0	0	15	19	34	19	4	8	8	108	93%
5		MTE002	Engineering Drawing 2	0	1	8	9	11	7	5	2	9	5	24	39	123	68%
6		HUM002	History Of Engineering & Technology	4	12	13	29	10	8	6	2	3	3	1	2	89	98%

#	Level	Code	Course Name	Grades												No. of Student	Success%
				A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F		
8	(Sophomore ) 100	BAS106	Mathematics 4	2	1	3	6	3	8	3	3	2	2	4	0	37	100%
9		CBE 104	Structural Analysis 2	0	1	1	0	2	6	3	0	3	3	9	16	46	65%
10		CBE105	Architectural Design	3	4	5	5	3	7	0	2	0	2	0	3	36	92%
11		CBE 106	Engineering geology	0	0	0	3	1	0	2	1	3	1	8	20	41	51%
12		CBE 107	Properties of Materials 2	0	1	5	2	5	6	6	4	3	1	1	1	35	97%
13		HUM 105	Environmental Sciences	0	1	2	4	3	1	1	0	3	3	1	13	33	61 %
14		CBE 108	Civil Drawing	0	0	2	1	4	5	2	2	6	5	8	9	46	80%
15	(Junior ) 200	CBE 206	Properties of Materials 3	0	0	0	2	2	2	2	3	3	5	22	32	77	58%
16		CBE 207	Structural Analysis 4	0	1	0	1	2	2	4	0	5	3	17	20	55	64%
17		CBE 208	Irrigation Structures	0	0	0	0	2	1	4	3	1	4	9	50	78	36%
18		CBE 209	Soil Mechanics 2	0	0	0	0	2	2	5	6	10	9	9	4	47	91%
19		CBE 210	Design of Concrete Structures 2	0	0	1	0	2	1	1	2	6	1	6	23	44	48%
20	(Senior - 01 ) 300	CBE 306	Foundations Engineering 2	0	0	0	6	1	8	10	6	8	6	8	2	55	96%
21		CBE 307	Design of Concrete Structures 4	0	2	2	1	6	3	7	4	7	1	12	10	57	82%
22		CBE 308	Design of Steel Structures 2	2	1	2	1	0	4	2	2	4	2	6	16	42	62%
23		CBE 309	Environmental & Sanitary Engineering	2	5	11	3	6	2	4	3	2	2	4	6	52	88%

#	Level	Code	Course Name	Grades												No. of Student	Success%
				A+	A	A-	B+	B	B-	C+	C	C-	D+	D	F		
24		CBE 310	Methods & Equipment of Construction	0	0	5	8	15	10	7	4	3	5	1	3	64	95%
25		HUM 307	Communication skills	0	22	9	7	4	1	1	1	0	0	0	0	46	100 %
26		CBE 311	Quality Control	1	1	4	15	10	10	6	2	0	0	0	0	50	100%
27	( Senior - 02 ) 400	CBE407	R.C Bridges	2	3	5	9	11	10	3	7	9	3	7	2	71	97%
28		CBE 408	Steel Bridges	0	2	4	12	13	12	10	13	5	3	11	4	91	96%
29		CBE 409	Techniques Of Planning	2	5	5	12	13	14	6	4	4	4	6	37	114	68%
30		CBE 410	Electrical Installations In Building	0	2	8	22	21	17	6	3	1	0	0	1	82	99%
31		CBE 411	Construction Project Specifications	0	3	8	28	16	14	7	5	4	5	6	1	98	99%
Total				18	68	103	191	184	202	156	145	144	108	239	447		





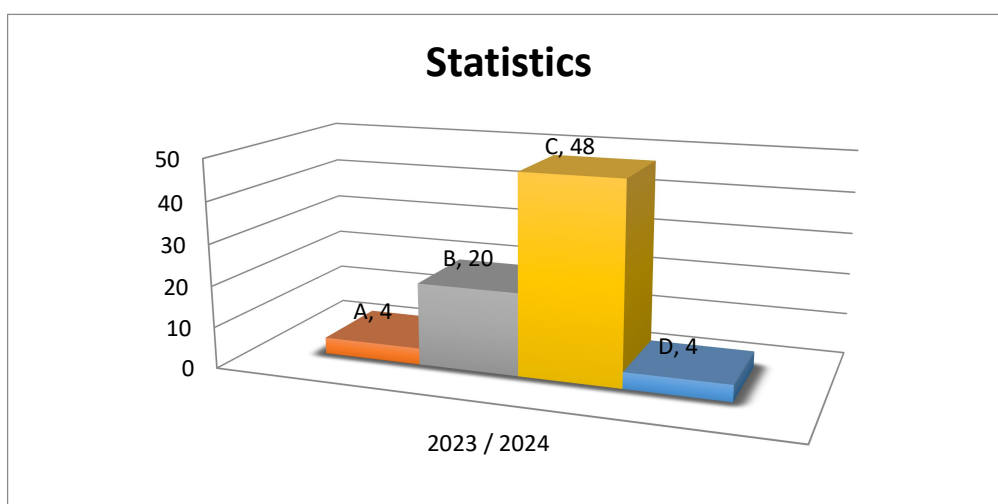
#### Analysis of Significant Results or Variations:

In this section, a list of courses where completion rates, grade distribution, or trends are significantly skewed, high or low results, or departed from policies on grades or assessments. For these courses, the reason for the significant result, and what action has been taken.

#	Course Name	Significant result or variation	Action taken
1	Mechanics 2	43% Success	N/A
2	Engineering geology	51% Success	
3	Irrigation Structures	36 % Success	
4	Design of Concrete Structures 2	48 % Success	

4. Grade Point Average (GPA) distribution analysis for the graduate students :

راسيون		الناجحون									الحاضرون		الطلاب المتقدمون	الطلاب الراقدين	القسم و الشعبة
نسبة %	عدد	نسبة %	جملة	مقبول	مقبول مرتفع	نجاح	مقبول مرتفع	نجاح	مقبول مرتفع	مقبول	نسبة %	عدد			
-	-	%100	68	-	1	16	27	16	4	4	%100	68	68	-	هندسة التشييد و البناء ( دور مايو )
-	-	100%	8	1	2	4	1	-	-	-	100%	8	8	-	هندسة التشييد و البناء ( دور يناير )
-	-	%100	76	1	3	20	28	16	4	4	%100	76	76	-	الاجمالي



5. Student graduated during the academic year:

م	كود الطالب	كود شؤون الطلاب	الحالة	اسم الطالب	عدد الساعات	المعدل التراكمي	التقدير	تقدير المشروع	تربية عسكري		
1	190003	20191217	مستجد	ابراهيم احمد محمد احمد	180	3.13	B	جيد جدا	A-	ممتاز منخفض	اجتاز
2	190007	20190036	مستجد	احمد جمال احمد محمد	180	2.80	C+	جيد مرتفع	B+	جيد جدا مرتفع	اجتاز
3	190010	20192330	مستجد	احمد رمضان قطب محمد مبارك	180	2.53	C+	جيد مرتفع	A	ممتاز	اجتاز
	190016	20190063	مستجد	احمد عباس مصطفى احمد	180	2.99	C+	جيد مرتفع	A+	ممتاز مرتفع	اجتاز
5	190020	20190102	مستجد	احمد عبدالناصر محمد ابراهيم	180	2.61	C+	جيد مرتفع	A	ممتاز	اجتاز
6	190022	20190217	مستجد	احمد عصام عبدالحميد عيد العال	180	2.85	C+	جيد مرتفع	A	ممتاز	اجتاز
7	190026	20190248	مستجد	احمد فتحي اسماعيل رسلان	180	3.08	B	جيد جدا	A	ممتاز	اجتاز
8	180035	20180258	مستجد	احمد محمد محمود محمد محمد شبيب	180	2.48	C	جيد	A+	ممتاز مرتفع	اجتاز
9	190036	20190475	مستجد	اسلام مصطفى شحات سيد	180	3.02	B	جيد جدا	A	ممتاز	اجتاز
10	180057	20180142	مستجد	السيد محمود عبدالعليم ابراهيم محمد	180	2.21	C	جيد	A	ممتاز	اجتاز
11	190250	20194168	مستجد	امثيه عبدالرحمن كمال علي جودة	180	3.42	B+	جيد جدا	A	ممتاز	---
12	190043	20190123	مستجد	ارباب سيد عبداللطيف خلف	180	3.31	B+	جيد جدا	A+	ممتاز مرتفع	اجتاز
13	190044	20190195	مستجد	يونس ابراهيم يوسف فرج الله	180	2.84	C+	جيد مرتفع	A+	ممتاز مرتفع	اجتاز
14	190214	20191034	مستجد	حسن ياسر مهني عبدالله	180	2.71	C+	جيد مرتفع	A	ممتاز	اجتاز
15	190057	20190109	مستجد	خالد عبدالدايم محمد سيد	180	2.81	C+	جيد مرتفع	A	ممتاز	اجتاز
16	190058	20192564	مستجد	خالد علي هاشم شاهه	180	3.18	B	جيد جدا	A	ممتاز	اجتاز
17	190061	20190078	مستجد	روماني عبدالملك وفيه حنين حنا	180	3.62	A	ممتاز	A+	ممتاز مرتفع	اجتاز
18	190064	20190292	مستجد	زياد طه احمد عواد	180	2.54	C+	جيد مرتفع	A	ممتاز	اجتاز
19	190070	20190219	مستجد	سما حسن مرتضى عتاسي	180	2.87	C+	جيد مرتفع	A	ممتاز	---
20	190076	20190245	مستجد	شوقي مسعود شوقي تصريف زخاري	180	3.57	A	ممتاز	A+	ممتاز مرتفع	اجتاز
21	190080	20190027	مستجد	طه عبدالرحيم عثمان سليم	180	2.61	C+	جيد مرتفع	A	ممتاز	اجتاز
22	190090	20190132	مستجد	عبدالرحمن علي حسين علي	180	3.07	B	جيد جدا	A	ممتاز	اجتاز
23	180120	20180278	مستجد	عبدالرحمن فوزي ابراهيم محمد	180	2.55	C+	جيد مرتفع	A	ممتاز	اجتاز
24	190096	20192839	مستجد	عبدالله ثابت عجمي عوض	180	2.77	C+	جيد مرتفع	A-	ممتاز منخفض	اجتاز
25	180128	20180016	مستجد	عبدالله محمد حسن عبدالله	180	2.19	C	جيد	B+	جيد جدا مرتفع	اجتاز
26	190098	20190072	مستجد	عبدالله محمد طه ابوشعشع	180	3.22	B	جيد جدا	A-	ممتاز منخفض	اجتاز
27	190102	20190239	مستجد	عمر احمد حميد سعيد	180	2.83	C+	جيد مرتفع	A	ممتاز	اجتاز
28	180146	20180150	مستجد	عمر فطمت احمد فؤاد عبدالعليم	180	2.42	C	جيد	A	ممتاز	اجتاز

م	كود الطالب	كود شؤون الطلاب	الحالة	اسم الطالب	عدد الساعات	المعدل التراكمي	التقدير	تقدير المشروع	تربية عسكري	
29	190104	20192313	مستجد	عمر علاء يوسف عبدالله	180	2.96	C+	جيد مرتفع	A-	ممتاز منخفض
30	190197	20193081	مستجد	عمر فتحي سيد مجتوب	180	2.61	C+	جيد مرتفع	A	ممتاز
31	180154	20181920	مستجد	عمر يحيى محمد العريسي العسكوي	180	2.32	C	جيد	A	ممتاز
32	180162	20180354	مستجد	فيصل مجدي محمد علفي	180	2.13	C	جيد	A+	ممتاز مرتفع
33	190114	20190817	مستجد	كريم صالح محمود علي	180	3.01	B	جيد جدا	A	ممتاز
34	180167	20180175	مستجد	كترس اسامه عبدالملك وهبه	180	2.31	C	جيد	B+	جيد جدا مرتفع
35	190115	20190176	مستجد	كترس اكرم جرجس رياض	180	2.91	C+	جيد مرتفع	A+	ممتاز مرتفع
36	190116	20190137	مستجد	كترس محسن ماهر خله	180	3.22	B	جيد جدا	A	ممتاز
37	180176	20180049	مستجد	ماريو يوليان فرجات قام	180	2.51	C+	جيد مرتفع	A+	ممتاز مرتفع
38	190121	20190198	مستجد	مارن محمد قرني زبيح عبدالقادر	180	2.64	C+	جيد مرتفع	A-	ممتاز منخفض
39	190123	20190121	مستجد	ماهر سماعة ماهر السيد رزق	180	2.94	C+	جيد مرتفع	A-	ممتاز منخفض
40	180181	20180075	مستجد	محمد احمد العريشي عطيه	180	2.10	C	جيد	B	جيد جدا
41	190128	20190157	مستجد	محمد احمد يوسف السيد لالين	180	2.39	C	جيد	A-	ممتاز منخفض
42	190129	20190304	مستجد	محمد اسامه حامد عبد الهادي	180	2.62	C+	جيد مرتفع	A-	ممتاز منخفض
43	180190	20182598	مستجد	محمد الشريف عكاشة ظله	180	2.43	C	جيد	A	ممتاز
44	180197	20180219	مستجد	محمد حسن محمد عبدالقني حسن	180	2.37	C	جيد	A	ممتاز
45	190136	20190241	مستجد	محمد رشدي اسماعيل اسماعيل صالح	180	3.39	B+	جيد جدا مرتفع	A	ممتاز
46	190243	20193995	مستجد	محمد سانح محمد عطيه حمد	180	2.71	C+	جيد مرتفع	A	ممتاز
47	180206	20180161	مستجد	محمد سانح محمد محمد القصورى	180	2.52	C+	جيد مرتفع	A	ممتاز
48	190138	20190340	مستجد	محمد شعاعه مدني محمد	180	3.00	B	جيد جدا	A	ممتاز
49	190246	20193571	مستجد	محمد عبد العالحميد محلول	180	3.03	B	جيد جدا	A	ممتاز
50	180296	20183793	مستجد	محمد محمد محمد محجوب	180	2.12	C	جيد	A+	ممتاز مرتفع
51	190154	20190023	مستجد	محمد مشهور عثمان محمد	180	2.93	C+	جيد مرتفع	A	ممتاز
52	190199	20192986	مستجد	محمد سامح بابل مخلوف	180	2.62	C+	جيد مرتفع	A	ممتاز
53	180229	20180163	مستجد	محمد ياسين منصور احمد	180	3.67	A	ممتاز	A-	ممتاز منخفض
54	190172	20190079	مستجد	مصطفى محمد عبدالحق مصطفى حسن	180	3.14	B	جيد جدا	A	ممتاز
55	190173	20190279	مستجد	مصطفى محمد مرزوق عبدالحمد	180	3.18	B	جيد جدا	A	ممتاز
56	190222	20193241	مستجد	منه الله عمر جلال متولى	180	3.07	B	جيد جدا	A-	ممتاز منخفض

م	كود الطالب	كود شئون الطالب	الحالة	اسم الطالب	عدد الساعات	المعدل التراكمي	التقدير	تقدير المشروع	تربية عسكري
57	190176	20190196	مستجد	منى سمير السيد الصائقي شريف	180	2.93	C+	A	ممتاز
58	190182	20190125	مستجد	نورالدين عبدالرحمن رمضان سعودي	180	3.22	B	A+	ممتاز مرتفع
59	190184	20190167	مستجد	هايدي سعيد صلاح الدين عباد الله	180	3.55	A	A-	ممتاز منخفض
60	190185	20190326	مستجد	هدى نبيل صبيحي منصور	180	3.35	B+	A	ممتاز
61	190210	20193024	مستجد	هنير محمد سيف الدين عامر	180	2.95	C+	A-	ممتاز منخفض
62	190211	20192989	مستجد	ياسمين ياسر طلعت ابراهيم	180	3.22	B	A-	ممتاز منخفض
63	190192	20190068	مستجد	يوسف حسن حسن السيد التوري	180	3.11	B	A	ممتاز
64	180263	20180221	مستجد	يوسف عبدالشافي عبداليدع يوسف	180	2.32	C	A	ممتاز

6. Employment of graduates:

Graduate Name	Company Name
<i>Shawey Masood Shawey</i>	Concord for Engineering and Contracting
<i>Ebrahim ahmed Mohamed</i>	Petroget Company
<i>Ahmed essam abdelhamid</i>	Alu-builders Egypt

## 7. Academic standards

### a. National Academic Reference Standards of Program:

According to the National Academic Reference Standard, the program in Mechanical Power Engineering must satisfy the following Competencies:

5.1. General Engineering NARS Competencies in 2018		
Level A (NARS)	A.1	Identify, formulate, and solve complex engineering problems by applying engineering fundamentals, basic science and mathematics.
	A.2	Develop and conduct appropriate experimentation and/or simulation, analyze and interpret data, assess and evaluate findings, and use statistical analyses and objective engineering judgment to draw conclusions.
	A.3	Apply engineering design processes to produce cost-effective solutions that meet specified needs with consideration for global, cultural, social, economic, environmental, ethical and other aspects as appropriate to the discipline and within the principles and contexts of sustainable design and development.
	A.4	Utilize contemporary technologies, codes of practice and standards, quality guidelines, health and safety requirements, environmental issues and risk management principles.
	A.5	Practice research techniques and methods of investigation as an inherent part of learning.
	A.6	Plan, supervise and monitor implementation of engineering projects, taking into consideration other trades requirements.
	A.7	Function efficiently as an individual and as a member of multi-disciplinary and multi- cultural teams.
	A.8	Communicate effectively – graphically, verbally and in writing – with a range of audiences using contemporary tools.
	A.9	Use creative, innovative and flexible thinking and acquire entrepreneurial and leadership skills to anticipate and respond to new situations.

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	A.10	Acquire and apply new knowledge; and practice self, lifelong and other learning strategies.
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5.2. Civil Engineering NARS		
<b>Level B (NARS)</b>	B.1	Select appropriate and sustainable technologies for construction of buildings, infrastructures and water structures; using either numerical techniques or physical measurements and/or testing by applying a full range of civil engineering concepts and techniques of: Structural Analysis and Mechanics, Properties and Strength of Materials, Surveying, Soil Mechanics and Fluid Mechanics.
	B.2	Achieve an optimum design of Reinforced Concrete and Steel Structures, Foundations and Earth Retaining Structures, Roadways, Sanitary Works and Irrigation structures.
	B.3	Plan and manage construction processes; address construction defects, instability and quality issues; maintain safety measures in construction and materials; and assess environmental impacts of projects.
	B.4	Deal with biddings, contracts and financial issues including project insurance and guarantees.



### 5.3. Construction & Building Competencies (NARS)

Level C (ARC)	C.1	Use diversity of analytical, design, construction engineering, construction techniques and methods to solve some project management problems and optimize project time, cost, and resources issues, and supervise construction sites and projects efficiently
	C.2	Acquire and improve personal skills, communication skills, leadership skills, lifelong learning, be able to work collaboratively in a multidisciplinary team, able to lead individual or group and supervise the work in construction sites or offices.
	C.3	Apply team approach and alternate solutions, and incorporating realistic constraints that include economic, environmental, ethical, health and safety, social, and political considerations in regards to project and public safety and sustainability issues.

#### b. External References (Benchmark) for Standards:

- (1) Higher Supreme Council for Education
- (2) Quality Assurance & Accreditation Project (Education Council for the Egyptian Universities and the Quality Assurance & Accreditation Project)

#### c. Last date of program NARS approval:

Institute council on 19/08/2023

## 8. Assessment Methods

**Commentary** (quoting evaluations from external evaluator and other stakeholders)

- External Evaluator is being appointed.



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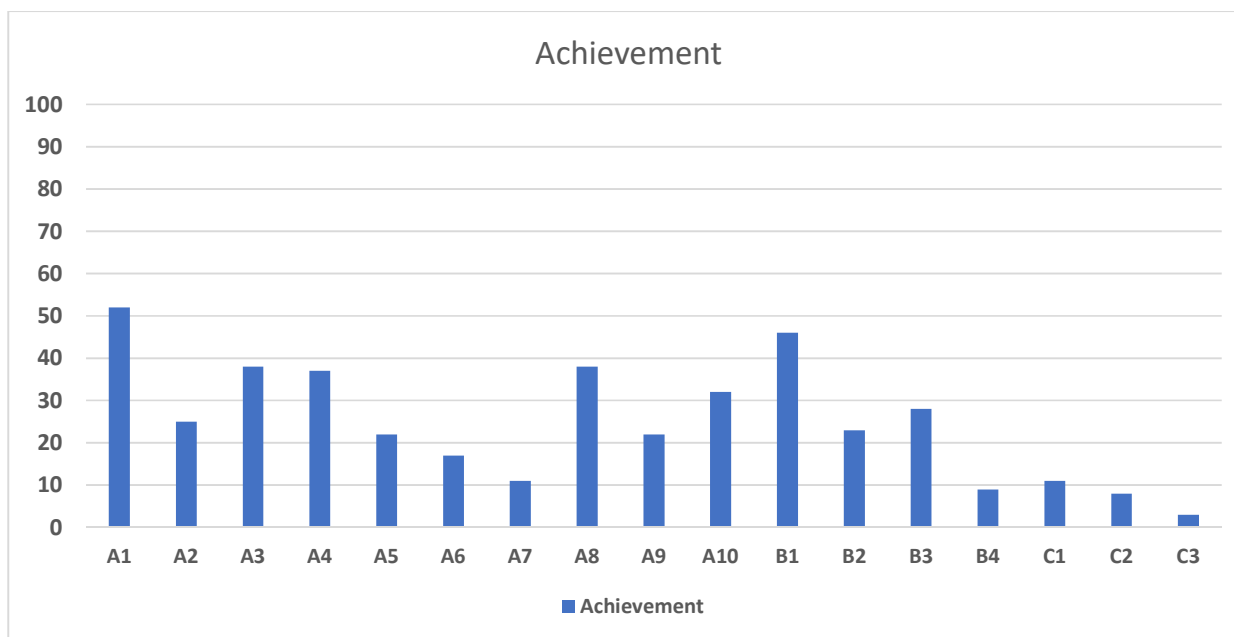
▪ **Assessment of Competencies:**

Assessment Method	Competencies
1. Assignments	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
2. Quizzes	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
3. Reports	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
4. Presentations	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
5. Laboratory experimental Exam	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
6. Oral Exam	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
7. Midterm Exam	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.
8. Final Exam	General and Civil Engineering NARS Competencies, Construction and Building Engineering ARS Competences.

## 9. Achievement of program Competencies:

– Achievement of program competencies (as indicated below)

Competencies	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	B1	B2	B3	B4	C1	C2	C3
Achievement in Subjects ( Number = 65 )	34	16	25	24	14	11	7	25	14	21	30	15	18	6	7	5	2
Achievement in Subjects ( % )	52	25	38	37	22	17	11	38	22	32	46	23	28	9	11	8	3



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## **10. Quality of teaching and learning opportunities**

- Data show are installed in all lecture halls
- Lecture halls are well equipped.
- Computer labs are upgrading.
- Feedback from graduates.

## **11. Effectiveness of student support systems**

- 61 cases in courses are above grade A for all courses
- 858 cases in courses are below grade D ( Grade = F ) and they still need more attention
- Regular meetings were provided between students and staff members to report the problems and consultations.
- The academic advisors are available to provide academic support to students. The office hours, e-mail and telephone numbers are communicated to the students.
- Program coordinators provide personal support to the students if needed.

## **12. Learning resources**

### **a) No. of Institute members and their assistants and their ratio to students**

- No. of Institute members (15) and their assistants (9)
- Total No. of students – five levels – (319)
- Ratio of Institute members to students (1 : 21)
- Ratio of assistants of the Institute members to students (1 : 36)

### **b) Matching of Institute members' specialization to programme needs**

- Some courses need the support of specialized members.

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**c) Availability and adequacy of program handbook**

- Books are available (hard copy) in library of the institute and in bookstore. Also, Books are available (soft copy) at Egyptian Knowledge Bank.

**d) Adequacy of computer facilities**

- The available laboratories are adequate but need upgrade.

**e) Adequacy of field/practical training resources**

- Some courses are provided.
- Summer practical training was reported.

**f) Adequacy of any other programme needs**

- The need of an exhibition hall for students works and projects.
- The need of appropriate facilities (WC's and drinking water supplies).
- The need of internet coverage for students for research.
- Increasing the number of teaching assistants and supporting managerial staff

### **13. Quality management and enhancement**

**a) Availability of regular evaluation and revision system for the program**

- This is the Fifth round for Evaluation and Revision (previously there were administrative & financial bylaw and starting from the academic year 2017/2018 there will be an updated administrative & financial bylaw) and still under review.
- Program description in course description of academic year 2023/2024 to be adapted with NARS 2018.

**g) Effectiveness of the system**

- The staff members are cooperating effectively in the system

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**b) Effectiveness of Institute laws and regulation for progression**

- Fair.

**c) Effectiveness of programme external evaluation system:**

**i. External evaluators**

- Through questionnaires – analysis is under progress to deduce conclusions and give recommendations. (get it from Quality Assurance Unit).

**ii. Independent Opinion on Quality of the Program after Considering Draft Report of the Self-Study Report SSR (Internal Evaluator/External Evaluator)**

**iii. Other stakeholders**

- A survey was made of some construction companies and consulting firms. Results are being assembled and analyzed and conclusions drawn.

**d) Institute response to student and external Evaluations**

- Fair

**14. Proposal of program development**

**a) Courses, deletions and additions and modifications**

**c) Requirements for the skill improvement of the staff and assistants**

- Workshop to train the staff and assistants for competencies evaluation.

## 15. Progress of previous year's action plan

Action Identified	Person Responsible	Progress of action	Reasons for non-completion
Equipping the room of staff assistants with computers and air conditioning units	Program / Institute administration	completed	
Upgrade the libraries	Program / Institute administration	completed	
Provide the program with new labs. In this direction, a control lab is installed.	Program / Institute administration	Completed	
The need of regular seminars	Program staff and department administration	completed	
Maintenance and restoration of doors and windows of lecture halls and laboratories	Program staff and program administration	Not Yet	Financial matter
A plan to receive the course file (soft copy) regularly via drive and chick list for submission	Program Quality Unit	Completed	
Academic advising plan and forms to motivate students	Program Quality Unit	Completed	
One full time secretary for the program administrative tasks	Program / Institute administration	Completed	

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Paints for faculty halls	Program / Institute administration	Not Yet	Financial matter
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## 16. Action plan

Action required	Person responsible
Maintenance and restoration of doors and windows of lecture halls and laboratories.	Program / Institute administration
Paints for faculty halls	Program Administration
Internet access (wired / wireless) in all lecture halls	Program Administration
Students don't have a suitable and quite space to study or work between classes. This led to a time waste for student. Therefore, a place will be dedicated for this purpose.	Program / college administration

Head of Department: Dr. Mostafa Abd Elmohsen

Date 22-08-2024

Signature: