

HISTORICAL NOTE

THE COLLEGE OF ENGINEERING

OF THE KINGDOM OF SAUDI ARABIA

FROM NOVEMBER 1962 TO JUNE 1974

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Before 1962, the Ministry of Education of the kingdom of Saudi Arabia had consulted UNESCO on the feasibility of opening some institution for higher education in the field of engineering. These discussions progressed favourably, and it was in November 1962 that the College of Engineering (known for a very brief period as the Higher Institute of Technology) opened, despite the fact that there was no campus on which to operate.

For a few months, the first intake of seventeen students had their lectures and laboratory work in space provided by the College of Science of Riyadh University. The staff consisted mainly of three Unesco personnel. However, during the first year, buildings which had been intended for use as a secondary school were allocated to the College, with the addition of some workshop and laboratory buildings.

Unesco was committed to supplying a series of technical advisors and a token amount of equipment, while the Ministry of Education was to provide a supply of Saudi and other manpower, plus a large expenditure on equipment.

The Unesco equipment was delivered in reasonable time, but the amount was too small to make any real impact, and the early years were marked by an absence of equipment, and even a supply of electricity to operate what equipment there was.

Nor was it easy to find graduate Saudis for the academic staff, and so there were such varying nationals as Egyptian, Lebanese, Greek, U.S.A., Pakistani, Syrian, U.K., Jordanian, Iraqi, Indian, and Palestinian. A table is given later, showing how the numbers of staff increased.

Every year, young Saudis with a first degree in engineering and science from other universities were taken on the staff for a year or two, and then sent overseas for post graduate studies. The present Dean, Dr. Jaafar Sabbagh, is one of the earliest of these, together with the former Deputy Dean, Dr.

Abdelwahab Mansourie. The present Head of Mathematics Section, Dr. Mohamed Gwaiz, has a connexion with the College dating back to February 1964. The College has been consistent in this policy of providing for an eventual majority Saudi staff. A list of those who have benefitted in the period under review is shown in Table 1.

It was difficult at the beginning to recruit students, for several reasons. The main reason was, of course, the relatively small output from the science section of the secondary schools. For instance, in the school year of 1962-63 (available for the College of Engineering in September 1963), there were only 336 graduates. There was a custom, understandably hard to break, that the best students were sent overseas for undergraduate studies at government expense. This resulted in the best Saudi students by-passing the College. Eventually it was agreed that the Ministry would no longer subsidise undergraduate studies overseas, where there was an appropriate College in the Kingdom.

Even with the annual increase of science section graduates, the opening of other institutions and Colleges still kept the numbers lower than the original concept.

Another factor was that the new College had no reputation or history to recommend it to possible students. However, after three or four years, the students themselves acted as propogandists when they were on leave, and the number of applicants swelled. The resulting present position is a happy one, in which the College can impose its own entrance examination, and (in the case of the Architecture Department) apply aptitude procedures.

Table 2 shows the rise of student population from the earliest days to the present.

The year 1966-67 was the year which saw the first students gaining their bachelor's degree, and all sixteen in the final class succeeded. The division

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TABLE 1

Name	Assisted at College	Department	Returned	Degree gained
J. Sabbagh	1963-64	Mechanical	1970	Ph.D.
A. Mansouri	"	Civil	1971	Ph.D.
A. Swailem	"	Electrical	1969	M.Sc.
I. Johary	"	Chemistry	1971	M.Sc.
S. Hamdan	"	Architect	—	—
M. Gwaiz	1964	Electrical	1972	Ph.D.
A. Mousalli	1964	Architecture	—	—
N. Kashmiri	1964-65	Civil	1969	Ph.D.
T. Bakr	"	Civil	1971	Ph.D.
T. Jamjoum	"	Civil	1971	Ph.D.
M. Safar	"	Civil	1972	Ph.D.
A. Redha	"	Civil	—	—
S. Athel	1965-67	Mechanical	1971	Ph.D.
K. Turki	"	Physics		
J. Salamah	"	Chemistry	1973	Ph.D.
A. Tamimi	1965-66	Mechanical		
A. Nouh	1966-68	Electrical	1973	Ph.D.
F. Tamimi	1967-69	Architect		
*M. Tashkendi	"	Civil		
*B. Khoshaim	1968-71	Mechanical		
*A. Amoud	1968-70	Electrical		
oM. Haider	"	Electrical		
*A. Suleiman	"	Electrical		
*K. Rowaihi	1969-71	Electrical		
M. Baleela	"	Architect		
*A. Shaalan	1970-71	Electrical		
*A. Fouad	"	Electrical		
*A. Dowaian	"	Civil		
S. Abdaly	1970-72	Architect		
*A. Bokhari	1971-72	Architect		
*A. Khogeer	1971-73	Architect		
*O. Mahaby	1971-72	Architect		
*M. Samarkandi	"	Electrical		
*F. Faris	1971-74	Architect		
*S. Hathloom	1972-73	Architect		
*A. Shoabi	"	Architect		
*M. Hossayen	"	Architect		
*Y. Nour	"	Electrical		
*A. Banah	"	Electrical		
*M. Jarallah	"	Civil		
D. Khateeb	1973-74	Electrical		
*D. Hamdan	"	Electrical		
*K. Dowaila	"	Civil		
*A. Saati	"	Civil		

* Means a graduate of the College of Engineering, Riyadh University.

into specialisation in this and subsequent years is shown in Table 3 .

It will be noticed that by the end of the 1969-70 academic year, a fourth specialisation, Architecture, had joined the original three engineering groups. Originally, separation into specialised departments took place at the beginning of the Third Year. The Architects were the first to break with this, and in 1969-70, there were Second Year Architects. Later, in the year 1971-72, the other Departments followed suit.

It has not been possible to get information year by year of where the College graduates found employment, but the figures for the first four years are given in Table 4.

Two changes deserve to be noted here, the first being a Royal Decree in early 1966 which gave the College its autonomy, and established a Board of Governors and a separate budget. The second was the subsequent assimilation, in the middle of 1967, of the College into the group of Colleges comprising the Riyadh University. There were already in exist-

Table 2.

Year	1	2	3	4	5	Total
1962-63	17	—	—	—	—	17
1963-64	66	18	—	—	—	84
1964-65	70	38	16	—	—	124
1965-66	51	54	33	14	—	152
1966-67	83	51	42	32	16	224
1967-68	64	67	54	33	28	246
1968-69	80	50	69	43	30	272
1969-70	173	54	57	50	34	368
1970-71	132	108	42	43	37	362
1971-72	150	119	69	44	38	420
1972-73	232	127	95	65	39	558
1973-74	235	167	111	76	62	651

Table 3

	Civil	Elect.	Mech	Architect	Total	Cumulative total
1966-67	9	3	4	—	16	16
1967-68	16	8	4	—	28	44
1968-69	20	4	3	—	27	71
1969-70	16	4	3	2	25	96
1970-71	13	10	3	8	34	130
1971-72	14	10	3	8	35	165
1972-73	17	11	1	6	35	200
1973-74	26	9	4	20	59	259

			Defence	PWD	Interior	Communication	Agriculture	Haj	Commerce	Information	Petrol	Petromin	Municipality	Education	National Guard	Mecca Elect. Co.	Aramco	Other Govts.	Private	Further education	Not known	Total		
Civil	1966-67	1	1	1	2	3													1				9	
Mechanical			3									1												4
Electrical			3																					3
Civil	1967-68			3	2	2	1	1		1									5			1	16	
Mechanical		1			1														2					4
Electrical		3								1									3			1	8	
Civil	1968-69				2	1							3	1					3	8	1	1	20	
Mechanical																		1						2
Electrical			1	1													1							4
Civil	1969-70	1											4	1					3	4	1	2	16	
Mechanical																			1					3
Electrical		2	1													1								4
Architecture												1												2

ence the five Colleges of Arts, Science, Pharmacy, Agriculture, and Commerce. The College of Engineering became the sixth.

Among other events was the sudden and untimely death of the first Dean, Dr. Ibrahim el Sherbini, in December 1966. Dr. Sherbini had spent several years in Saudi Arabia, away from his native Cairo, and had devoted himself to the nurturing of the College.

Also, the connexion with Unesco was brought to a successful end in August 1969, after seven years of co-operation, during which time the Organisation had contributed 374 man-months, and had posted nineteen officers to Riyadh of nationalities as diverse as French, Greek, Pakistani, British, Indian, Philippino, Australian, Chinese, Egyptian, and German.

Naturally, as the number of students increased, the academic staff had to keep pace, and this growth is shown in Table 5.

The first Saudi to be appointed Dean was Dr. Talib Obaid, a geologist, in February 1968. The gap between this date and the death of Dr. Sherbini had been filled by Dr. Abdelaziz el Khwaiter, Vice-Rector of the University, acting through Mr. Hussein al Harthy, resident as Deputy Dean in the College of Engineering. It was at the beginning of the 1972-73 academic year that the College had its first Saudi engineer Dean, in the person of Dr. Jaafar Sabbagh. He had returned in 1970, and had served as Deputy Dean. On his election as Dean, the post of Deputy Dean went to Dr. Abdulwahab Mansouri. At the end of his term of office, summer 1974, he was succeeded by Dr. Saleh el Athel as Deputy Dean.

As has been already noted, the buildings had originally been built for a secondary school. This comprised three levels of classrooms, together with staff rooms, to which had been added a social block

Table 5

	Saudi		Non-Saudi	Unesco	Total
	Demonstrators	Others			
1962-63	-	-	1	3	4
1963-64	7	-	8	4	19
1964-65	7	-	16	5	28
1965-66	5	-	20	6	31
1966-67	5	-	26	8	39
1967-68	6	1	42	4	53
1968-69	8	2	45	8	63
1969-70	6	7	57	-	70
1970-71	7	5	56	-	68
1971-72	7	9	70	-	86
1972-73	10	10	68	-	88
1973-74	5	12	79	-	96

and eight large workshop/laboratories, with ancillary preparation and storage accommodation.

It was not long before the limitations became apparent, and ten more laboratories for civil engineering were added. At the same time, laboratories for chemistry and physics were built, together with some suitable for electrical engineering.

A large dormitory block was erected at the extreme end of the campus territory, designed to house nearly four hundred students. It was not occupied on its completion, and today it is the home of the Architecture Department and the Administration.

About the same time, the space under the first level classrooms was enclosed to form the Library, which had been housed in the social block, where the space was needed for the electronics laboratory. There was also provision for a staff common room and a mosque. This space is now the Computer Center.

Simultaneously, the space under the staff rooms and assembly hall was enclosed to provide rooms for the Administration and some academic staff.

Some time later, the ground floor of the present

chemistry laboratories was built, together with two auditoria. The block which had hitherto housed the chemistry and physics laboratories was made into double storey building, providing twice the previous floor space.

It is difficult for someone visiting the College for the first time nowadays to realise that there was ever a shortage of equipment, but for the first three or four years, this was a serious handicap. In fact, it was not until about 1967-68 that deliveries began in earnest. Since then, there has been a steady flow of whatever was required.

Generosity towards other Islamic countries has always been shown, and the place occupied by (chiefly Arab) foreign students is shown as follows showing foreign students as a percentage of the total number of students in the College.

1962-63	1963-64	1964-65	1965-66	1966-67
6	13	27	36	30
1967-68	1968-69	1969-70	1970-71	1971-72
34	35	25	29	24
1972-73	1973-74			
24	25			