Mineral Engineering Student Enrollment Passes 10,000

by William B. Plank

FOR the first time in four years the number of mineral engineering students in the 228 engineering colleges of the U. S. and Canada exceeds 10,000. According to figures just released by the American Society for Engineering Education, the current enrollment of all engineering students is 222,178.

The total of 10,274 mineral engineering students, undergraduate and graduate, is a 4½ pct increase over a year ago. Total engineering is 11 pct larger than last year, about the same as in 1949-50, and 24 pct above 1950-51.

Except for the metallurgical engineers, fewer by 3.2 pct than last year, mineral engineering students have increased. Ceramic engineers, with 626, lead the list with a 12 pct increase. The increases in the other branches are: geological, 10 pct; petroleum, 9 pct; and mining, 3 pct.

Among the 23,272 first degrees granted last year by the schools in the U. S. and Canada, 1476 were to mineral engineers. Of these, 231 were in mining, 486 in metallurgy, 460 in petroleum, 113 in ceramics, and 186 in geological engineering.

Looking ahead, an increasing number of graduates from U. S. mineral engineering schools may be expected for the next four years—except in metallurgical engineering. This is shown by the increased sizes of the four-year class groups. In metallurgical engineering, however, the entering class is 9 pct smaller than last year's entering class—the smallest, in fact, of the four classes in that branch. Additional precollege guidance, or scholarship aid, is indicated for this group.

This year 1179 women were enrolled in the engineering schools of both countries, an increase of 26 pct. Last June 36 women received their degrees in engineering, but according to a recent NEA release, many more women engineers are needed in government service and in industry.

Although current growth in the entire engineering group is encouraging to industry, it is yet not as rapid as in the other college groups. Of 2,499,750 U. S. college students, only 7.5 pct are in engineering as compared with 10.5 pct in 1947-48.

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First Degrees, All Engineers, U. S. and Canada

1942-43	14,714	1949-50	54,441
1943-44	11,155	1950-51	43,762
1944-45	4,724	1951-52	31,660
1945-46	8,219	1952-53	25,332
1946-47	19,272	1953-54	23,272
1947-48	30,018	1954-55	28,416
1948-49	46,934		

Engineering Student Enrollment Comparison Undergraduates and Graduates

Courses	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55
Mining	2,223	1,607	1,338	1,168	1,089	1,118
Metallurgical	3,887	3,511	2,996	3,085	3,159	3,050
Petroleum	4,175	3,321	2,699	3,448	3,772	4,110
Ceramic	998	886	667	579	557	626
Geological	?	1,349	1,027	1,173	1,249	1,370
Total Mineral Engineers, U.S.	11,283	10,674	8,727	9,453	9,826	10,274
Chemical	19,976	16,323	14,079	15,026	15,858	17,097
Civil	29,109	24,505	21,801	22,393	23,075	23,799
Mechanical	45,632	35,347	30,420	32,791	35,097	38,587
Electrical	45,711	34,105	29,966	32,848	37,633	43,305
Industrial	?	?	6,578	6,643	6,786	7,168
Other Engrs.	68,001	59,308	36,123	39,364	43,557	47,224
Total Engrs., ECPD			147,694	158,518	171,832	187,454
Other U. S. Engrs.			17,943	18,031	21,501	26,960
Total U. S. Engrs.	219,712	180,262	165,637	176,549	193,333	214,414
Canadian Engrs.	6,821	4,285	5,433	5,812	6,894	7,764
Total Engrs. U. S. and Canada	226,533	184,547	171,070	182,361	200,227	222,178

Graduate Engineering Enrollment, 1954-55, U. S. and Canada

Courses	Masters	Doctors	Degrees, 1953-54	
			M.S.	Ph.D.
Mining	64	9	22	3
Metallurgical	493	243	139	53
Petroleum	165	15	59	6
Ceramic	77	34	34	16
Geological	98	30	9	2
Total Mineral Engrs., U. S., ECPD	897	331	263	80
Chemical	1,725	622	448	133
Civil	1,900	339	563	43
Mechanical	3,040	421	710	72
Electrical	5,426	892	978	111
Industrial	1,487	91	367	6
Other Engrs.	1,987	583	732	145
Unclassified	610	0	69	0
Total for ECPD Schools	17,072	3,279	4,130	590
Other U. S. Schools	369	2	47	0
Total for all U. S. Schools	17,441	3,281	4,177	590
Canadian Schools	167	68	90	23
Grand Total	17,608	3,349	4,267	613

Undergraduate and Graduate Engineering Enrollment, U. S. and Canada, 1954-55, 228 Schools

Schools	Courses	Fresh.	Soph.	Junior	Senior	5th Yr. & Others	Total Undergrads	Grad. Students	Grand Total
31	Mining	281	276	240	228	20	1,045	73	1,118
48	Metallurgical	451	586	562	476	239	2,314	736	3,050
22	Pet. & N. Gas	1,291	1,003	827	674	135	3,930	180	4,110
14	Ceramic	150	145	113	90	17	515	111	626
25	Geological	445	301	253	228	15	1,242	128	1,370
	Total Mineral Engineers U. S.	2,618	2,311	1,995	1,696	426	9,046	1,228	10,274
107	Chemical	4,503	4,075	2,986	2,180	1,006	14,750	2,347	17,097
137	Civil	5,816	5,403	4,406	3,992	1,943	21,560	2,239	23,799
133	Mechanical	9,215	9,089	7,077	5,576	4,169	35,126	3,461	38,587
138	Electrical	10,381	9,938	7,373	5,035	4,260	36,987	6,318	43,305
65	Industrial	1,052	1,316	1,361	1,348	513	5,590	1,578	7,168
	Other Engrs.	5,134	4,228	3,379	2,834	1,237	16,812	2,570	19,382
94	Unclassified	16,812	1,985	122	16	8,297	27,232	610	27,842
150	Total Engrs. ECPD Schools	55,531	38,345	28,699	22,677	21,851	167,103	20,351	187,454
68	Other U. S. Engr. Schools	9,974	5,729	3,642	2,870	4,374	26,589	371	26,960
218	Total U. S. Engineers	65,505	44,074	32,341	25,547	26,225	193,692	20,722	214,414
10	Canadian Engineers	2,520	1,841	1,477	1,239	452	7,529	235	7,764
228	Grand Total U. S. & Canada	68,025	45,915	33,818	26,786	26,677	201,221	20,957	222,178