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THE
MAY 10 1977
UNIVERSITY
AT URBANA-CHAMPAIGN

OUR 1969 GRADUATES
5 YEARS LATER

COLLEGE OF ENGINEERING
UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Since the Fall of 1956 the College of Engineering has been surveying its graduates who have completed five years of industrial experience. Much valuable data has been gathered during this period of time and the reports that have been issued have met with widespread acceptance among our graduates and among those governmental and industrial employers who visit our campus to hire graduates. However, some publications have a way of outliving their usefulness.


I would be especially interested in receiving comments from the members of the Class of 1969 concerning the usefulness of this report. Should the report be continued in its present form or should it be continued at all? How can the report be altered to improve its usefulness to our graduates?

Those industrial and governmental recruiters visiting the Engineering Placement Office and picking up copies of these reports are encouraged to give us their reactions to the report. In these times of rising costs, we want to make doubly sure that we are producing useful and needed documents.

Very truly yours,



D. R. Opperman, Director
Engineering Placement and
Cooperative Education
College of Engineering
University of Illinois
Urbana, Illinois 61801



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FIVE-YEAR SALARY PROGRESS OF ENGINEERING GRADUATES WHO RECEIVED A B.S. DEGREE IN 1969

	Number of Graduates	Number of Questionnaires Returned	Military Service	Currently in Graduate School	Number Unemployed	Number Employed	Average Monthly Salary -- 1974	High Monthly Salary -- 1974	Low Monthly Salary -- 1974	Average Starting Salary -- 1969	Percent of Increase -- 1969-1974
All Engineers	686 ¹	348	5.7% 20	6.9% 24	.9% 3	86.5% 301	\$1394.	\$4000.	\$ 500.	\$ 835. ²	66.94%
Aero. E.	67	36	7	1	-	28	1394.	4000.	1000.	830.	67.95%
Ag. E.	24	12	-	-	-	12	1372.	1990.	1000.	814.	68.55%
Ceram. E.	22	12	-	-	-	12	1417.	2500.	900.	837.	69.29%
Civil E.	120	64	4	1	3	56	1402.	2000.	1100.	808.	73.51%
Elec. E.	209	102	4	12	-	86	1373.	3000.	500.	861.	59.46%
E. Mech.	17	10	-	1	-	9	1272.	1550.	1120.	814.	56.27%
E. Phys.	32	15	2	3	-	10	1267.	1675.	1050.	839.	51.01%
Gen. E.	52	29	3	2	-	24	1422.	1725.	1126.	805.	76.64%
Ind. E.	22	10	-	1	-	9	1571.	2300.	1155.	836.	87.92%
Mech. E.	96	52	-	3	-	49	1395.	3000.	1015.	838.	66.47%
Met. E.	14	6	-	-	-	6	1332.	1490.	1065.	829.	60.68%
E. Tech.	2	-	-	-	-	-	-	-	-	-	-

¹43 Alumni were not contacted (foreign students, deceased graduates, and others for whom addresses were unavailable).

²The average starting salary for the May 1974 graduates was \$1000 per month.

SALARY COMPARISON FIGURES OF THOSE GRADUATES WHO HAVE COMPLETED AN ADVANCED DEGREE SINCE 1969 AND THOSE WHO HAVE NOT¹

The following salary comparison figures require some explanation. It must be remembered that the one hundred four 1969 graduates who have completed an advanced degree have taken time out to complete the necessary academic work during the five years since their graduation in 1969. As a result, their years of employment will vary in proportion to the time required to complete this work. The salary figure on those graduates listed under "No Advanced Degree" represents a financial progress one to four years less than the full five years.

	Total Employed	No Advanced Degree	M.S. in Original Field	M.S. in Other Technical Field	M.S. in Non-Technical Field	Ph.D. in Original Field	Ph.D. in Other Technical Field	Ph.D. in Non-Technical Field	M.B.A.	Law Degree	Other
All Engineers 1974 Average Salary	301 \$1394.	197 \$1376.	41 \$1420.	23 \$1388.	1 \$1000.	2 \$1590.	- -	- -	30 \$1461.	6 \$1516.	1 \$1100.
Aero. & Astro. Eng. 1974 Average Salary	28 1394.	17 1443.	2 1330.	3 1445.	1 1000.	- -	- -	- -	3 1300.	1 1525.	1 1100.
Agricultural Eng. 1974 Average Salary	12 1372.	9 1362.	1 1314.	1 1370.	- -	- -	- -	- -	1 1530.	- -	- -
Ceramic Eng. 1974 Average Salary	12 1417.	9 1458.	1 1100.	1 1200.	- -	1 1580.	- -	- -	- -	- -	- -
Civil Eng. 1974 Average Salary	56 1402.	37 1380.	11 1430.	2 1491.	- -	- -	- -	- -	6 1461.	- -	- -
Electrical Eng. 1974 Average Salary	86 1373.	54 1344.	17 1307.	2 1366.	- -	1 1600.	- -	- -	10 1584.	2 1533.	- -
Eng. Mechanics 1974 Average Salary	9 1272.	6 1285.	1 1291.	1 1225.	- -	- -	- -	- -	1 1224.	- -	- -
Eng. Physics 1974 Average Salary	10 1267.	1 1150.	1 1080.	6 1299.	- -	- -	- -	- -	2 1327.	- -	- -
General Eng. 1974 Average Salary	24 1422.	16 1414.	- -	2 1466.	- -	- -	- -	- -	4 1337.	2 1612.	- -
Industrial Eng. 1974 Average Salary	9 1571.	8 1564.	- -	- -	- -	- -	- -	- -	1 1625.	- -	- -
Mechanical Eng. 1974 Average Salary	49 1395.	35 1344.	7 1593.	5 1473.	- -	- -	- -	- -	1 1530.	1 1280.	- -
Metallurgical Eng. 1974 Average Salary	6 1332.	5 1319.	- -	- -	- -	- -	- -	- -	1 1400.	- -	- -

¹Of the 104 who completed an advanced degree 55 (52.88%) completed the degree as a full-time student and 47 (45.19%) as a part-time student while employed.

CORRELATION BETWEEN SCHOLASTIC AVERAGE AND FINANCIAL PROGRESS 1969-1974

	Total Employed and 1974 Average Salary	1st Decile 5.000 - 4.500	2nd Decile 4.499 - 4.250	3rd Decile 4.249 - 4.033	4th Decile 4.032 - 3.858	5th Decile 3.857 - 3.733	6th Decile 3.732 - 3.620	7th Decile 3.619 - 3.481	8th Decile 3.480 - 3.327	9th Decile 3.326 - 3.230	10th Decile 3.229 - 3.000
All Engineers	301 \$1394.	31 \$1501.	30 \$1406.	30 \$1450.	30 \$1351.	30 \$1401.	30 \$1371.	30 \$1324.	30 \$1279.	30 \$1511.	30 \$1340.
Aero. E.	28 1394.	3 1360.	1 1125.	1 1610.	3 1166.	1 1260.	3 1320.	5 1255.	3 1258.	3 2266.	5 1334.
Ag. E.	12 1372.	1 1370.	2 1465.	- -	1 1638.	1 1990.	2 1223.	3 1256.	- -	1 1000.	1 1330.
Ceram. E.	12 1417.	1 1410.	- -	1 1200.	1 900.	1 1600.	1 1100.	1 1335.	1 1200.	2 2040.	3 1394.
Civil E.	56 1402.	6 1405.	4 1382.	5 1386.	6 1412.	5 1509.	6 1534.	4 1397.	6 1332.	9 1326.	5 1383.
Elec. E.	86 1373.	12 1380.	9 1423.	14 1541.	7 1353.	7 1417.	9 1321.	8 1302.	8 1206.	6 1366.	6 1274.
E. Mech.	9 1272.	- -	1 1291.	1 1265.	1 1225.	1 1120.	1 1350.	1 1550.	1 1175.	- -	2 1237.
E. Phys.	10 1267.	1 1387.	4 1366.	3 1157.	- -	- -	2 1177.	- -	- -	- -	- -
Gen. E.	24 1422.	- -	4 1471.	1 1126.	2 1450.	5 1352.	2 1662.	3 1375.	4 1311.	1 1600.	2 1585.
Ind. E.	9 1571.	- -	- -	1 2300.	1 1550.	2 1489.	- -	- -	1 1155.	2 1637.	2 1440.
Mech. E.	49 1395.	7 1669.	5 1432.	3 1347.	7 1355.	5 1212.	4 1379.	3 1318.	6 1362.	6 1406.	3 1288.
Met. E.	6 1332.	- -	- -	- -	1 1400.	2 1405.	- -	2 1360.	- -	- -	1 1065.

JOB CHANGES SINCE 1969

			No Change			One Change			Two Changes			Three Changes			Four or More Changes			Respondents Making One or More Job Changes	
	Total Employed	Average Salary	Number Employed	Total Percent of No Change	Average Salary	Number Employed	Total Percent of Change	Average Salary	Number Employed	Total Percent of Change	Average Salary	Number Employed	Total Percent of Change	Average Salary	Number Employed	Total Percent of Change	Average Salary	Total	Percent
All Engineers	301	\$1394.	184	61.13%	\$1395.	86	28.57%	\$1378.	23	7.64%	\$1435.	6	1.99%	\$1393.	2	.66%	\$1532.	117	38.87%
Aero. E.	28	1394.	13	46.43%	1333.	9	32.14%	1259.	5	17.86%	1856.	1	3.57%	1100.	-	-	-	15	53.57%
Ag. E.	12	1372.	8	66.67%	1349.	3	25.00%	1455.	1	8.33%	1314.	-	-	-	-	-	-	4	33.33%
Ceram. E.	12	1417.	7	58.33%	1320.	4	33.33%	1525.	-	-	-	-	-	-	1	8.33%	1665.	5	41.67%
Civil E.	56	1402.	29	51.79%	1362.	24	42.86%	1436.	3	5.36%	1525.	-	-	-	-	-	-	27	48.21%
Elec. E.	86	1373.	50	58.82%	1420.	22	25.88%	1370.	9	9.41%	1066.	4	4.71%	1414.	1	1.18%	1400.	36	41.18%
E. Mech.	9	1272.	4	44.44%	1347.	2	22.22%	1147.	3	33.33%	1255.	-	-	-	-	-	-	5	55.55%
E. Phys.	10	1267.	10	100.00%	1267.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gen. E.	24	1422.	21	87.50%	1420.	3	12.50%	1439.	-	-	-	-	-	-	-	-	-	3	12.50%
Ind. E.	9	1571.	6	66.67%	1550.	2	22.22%	1615.	-	-	-	1	11.11%	1604.	-	-	-	3	33.33%
Mech. E.	49	1395.	32	65.31%	1451.	15	30.61%	1292.	2	4.08%	1275.	-	-	-	-	-	-	17	34.69%
Met. E.	6	1332.	4	66.67%	1276.	2	33.33%	1445.	-	-	-	-	-	-	-	-	-	2	33.33%

PRESENT GEOGRAPHIC LOCATION OF 1969 ENGINEERING GRADUATES

Location	All Engineers	Percent	Percentage Geographical Location 1969	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Illinois	126	41.86%	36.94%	5	6	3	34	33	3	3	10	6	21	2
California	33	10.96%	12.00%	10	-	2	4	8	2	2	3	-	2	-
Michigan	14	4.65%	6.82%	2	2	-	-	-	1	-	1	-	7	1
Wisconsin	12	3.99%	2.59%	-	3	1	2	3	1	-	-	-	1	1
Indiana	10	3.32%	2.59%	1	-	2	1	4	-	-	-	1	1	-
Texas	9	2.99%	4.00%	1	-	-	1	3	-	2	1	-	1	-
Florida	8	2.66%	.24%	-	-	-	3	4	-	-	-	-	-	1
Ohio	8	2.66%	2.82%	-	-	1	2	2	2	-	-	-	1	-
Missouri	7	2.33%	4.47%	1	-	-	-	2	-	1	-	-	3	-
Pennsylvania	7	2.33%	7.29%	1	-	2	1	-	-	-	3	-	-	-
Arizona	6	1.99%	1.18%	1	-	-	-	4	-	-	-	1	-	-
Colorado	6	1.99%	1.18%	1	-	-	1	2	-	1	-	-	1	-
Maryland	6	1.99%	1.41%	-	-	-	-	2	-	1	1	-	2	-
New York	6	1.99%	2.12%	1	-	1	-	2	-	-	1	1	-	-
New Jersey	5	1.66%	2.35%	-	-	-	-	5	-	-	-	-	-	-
Alaska	4	1.33%	-	-	-	-	-	1	-	-	-	-	2	-
Connecticut	3	1.00%	1.88%	-	-	-	-	1	-	-	-	-	-	-
Georgia	3	1.00%	-	-	-	-	1	2	-	-	-	-	-	-
Iowa	3	1.00%	1.64%	-	-	-	-	2	-	-	-	-	1	-
Louisiana	3	1.00%	.24%	-	-	-	2	-	-	-	1	-	-	-
Massachusetts	3	1.00%	1.18%	-	-	-	-	1	-	-	-	-	2	-
Washington (State)	3	1.00%	2.12%	1	-	-	1	1	-	-	-	-	-	-
Kentucky	2	.66%	.24%	1	-	-	-	-	-	-	-	-	-	1
Minnesota	2	.66%	1.65%	-	-	-	-	1	-	-	1	-	-	-
Washington, D.C.	2	.66%	.47%	-	-	-	1	-	-	-	1	-	-	-
Overseas	2	.66%	-	-	-	-	-	1	-	-	-	-	1	-
Maine	1	.33%	.24%	-	-	-	1	-	-	-	-	-	-	-
Mississippi	1	.33%	-	1	-	-	-	-	-	-	-	-	-	-
New Mexico	1	.33%	.24%	-	-	-	-	1	-	-	-	-	-	-
North Carolina	1	.33%	.24%	1	-	-	-	-	-	-	-	-	1	-
Oregon	1	.33%	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	1	.33%	-	-	-	-	-	-	-	-	-	-	1	-
Virginia	1	.33%	.24%	-	-	-	-	1	-	-	-	-	-	-
Wyoming	1	.33%	.24%	-	-	-	1	-	-	-	-	-	-	-
Hawaii	-	-	.24%	-	-	-	-	-	-	-	-	-	-	-
Kansas	-	-	.47%	-	-	-	-	-	-	-	-	-	-	-
Utah	-	-	.24%	-	-	-	-	-	-	-	-	-	-	-
West Virginia	-	-	.24%	-	-	-	-	-	-	-	-	-	-	-
Totals	301	100.00%	100.00%	28	12	12	56	85	9	10	24	9	49	6

THE EMPLOYED 1969 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING TYPES OF COMPANIES

Present Type of Company	All Engineers	Percent	1974 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Electronics	28	9.30%	\$1469.	-	-	4 \$1391.	-	19 \$1437.	-	3 \$1329.	-	-	2 \$1360.	-
Aircraft, Missile, & Space	25	8.31%	1331.	13 \$1299.	-	-	-	3 1445.	1 \$1225.	3 1265.	2 \$1442.	-	2 1462.	1 \$1230.
Public Utilities	23	7.64%	1487.	1 1425.	1 \$1638.	-	1 \$1546.	16 1480.	-	-	1 1600.	1 \$1550.	1 1375.	1 1400.
Automobile & Auto- motive Equipment	20	6.64%	1407.	1 1610.	4 1326.	-	-	-	2 1233.	-	-	2 1615.	10 1412.	1 1400.
Communications Equipment	20	6.64%	1397.	1 1300.	-	2 1372.	1 1800.	11 1301.	-	-	-	3 1658.	2 1407.	-
Construction & Building Materials	20	6.64%	1342.	1 1100.	1 1400.	-	13 1379.	2 1175.	1 1120.	-	1 1700.	-	1 1250.	-
Consulting Engineers	19	6.31%	1468.	-	2 1682.	-	11 1466.	3 1377.	-	-	1 1370.	-	2 1450.	-
Heavy Equipment	17	5.65%	1346.	-	2 1342.	-	1 1280.	-	1 1550.	-	3 1312.	-	9 1328.	1 1490.
Electrical Equipment	15	4.98%	1384.	1 1400.	-	-	-	5 1470.	1 1350.	-	4 1343.	-	3 1408.	1 1065.
Chemical & Chemical Products	12	3.99%	1396.	-	-	1 1200.	2 1382.	2 1318.	-	-	1 1600.	1 1625.	5 1386.	-
Federal Government	12	3.99%	1383.	-	-	-	2 1405.	5 1253.	-	-	3 1508.	1 1604.	1 1400.	-
Metal & Metal Products	11	3.65%	1418.	1 1100.	-	1 2500.	1 1278.	-	1 1265.	-	3 1432.	1 1155.	2 1300.	1 1410.
State Government	10	3.32%	1308.	1 1208.	-	-	9 1319.	-	-	-	-	-	-	-
Research Laboratory	8	2.66%	1272.	1 1135.	-	-	-	6 1285.	-	-	1 1333.	-	-	-
Controls & Instrumentation	7	2.33%	1353	1 1125.	-	-	-	4 1336.	-	1 1675.	-	-	1 1325.	-

(Continued on following page.)

THE EMPLOYED 1969 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING TYPES OF COMPANIES (Continued)

Present Type of Company	All Engineers	Percent	1974 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
School	7	2.33%	\$1123.	1 \$1000.	-	1 \$1219.	-	3 \$1159.	-	2 \$1085.	-	-	-	-
City & County Governments	6	1.99%	1367.	-	-	-	6 \$1367.	-	-	-	-	-	-	-
Petroleum	6	1.99%	1501.	1 1600.	-	-	4 1482.	-	-	-	1 \$1477.	-	-	-
Mechanical Equipment	6	1.99%	1249.	-	-	-	2 1244.	1 1250.	-	-	-	-	3 \$1253.	-
Data Processing	4	1.33%	1320.	-	-	1 1580.	-	2 1230.	-	-	1 1240.	-	-	-
Heating & Air Conditioning	3	1.00%	1894.	1 1458.	-	-	-	-	1 \$1224.	-	-	-	1 3000.	-
Food	2	.66%	1301.	-	-	-	1 1352.	-	1 1250.	-	-	-	-	-
Medical Products and Instruments	2	.66%	1403.	1 1606.	-	-	-	-	-	-	-	-	1 1200.	-
Law	2	.66%	1450.	-	-	-	-	1 1400.	-	-	1 1500.	-	-	-
Agricultural	2	.66%	2450.	1 4000.	-	1 900.	-	-	-	-	-	-	-	-
Glass, Ceramics & Refractories	1	.33%	1300.	-	-	1 1300.	-	-	-	-	-	-	-	-
Machine Tools	1	.33%	1100.	1 1100.	-	-	-	-	-	-	-	-	-	-
Insurance	1	.33%	1050.	-	-	-	-	-	-	1 1050.	-	-	-	-
Wood Products	1	.33%	1200.	-	-	-	-	1 1200.	-	-	-	-	-	-
Recycling	1	.33%	1667.	-	-	-	1 1667.	-	-	-	-	-	-	-

(Continued on following page.)

THE EMPLOYED 1969 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING TYPES OF COMPANIES (Continued)

Present Type of Company	All Engineers	Percent	1974 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Oriental Rugs	1	.33%	\$1300.	-	-	-	-	-	-	-	-	-	1 \$1300.	-
Tire & Rubber	1	.33%	1150.	-	-	-	-	1 \$1150.	-	-	-	-	-	-
Plastics	1	.33%	1280.	-	-	-	-	-	-	-	-	-	1 1280.	-
Management Consulting	1	.33%	1833.	-	-	-	-	1 1833.	-	-	-	-	-	-
Regional Cooperative	1	.33%	1080.	-	1 \$1080.	-	-	-	-	-	-	-	-	-
Real Estate	1	.33%	1300.	-	-	-	-	-	-	-	-	-	1 1300.	-
Truck Body Manufacturing	1	.33%	1500.	-	-	-	1 \$1500.	-	-	-	-	-	-	-
Newspaper	1	.33%	1300.	-	-	-	-	-	-	-	1 \$1300.	-	-	-
Entertainment	1	.33%	1000.	-	1 1000.	-	-	-	-	-	-	-	-	-
Totals Average Salary	301	100.00%	\$1394.	28 \$1394.	12 \$1372.	12 \$1417.	56 \$1402.	86 \$1373.	9 \$1272.	10 \$1267.	24 \$1422.	9 \$1571.	49 \$1395.	6 \$1332.

SIZE OF ORGANIZATIONS IN WHICH THE 1969 GRADUATES ARE NOW EMPLOYED

	All Engineers	Aero E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Total Employed	301	28	12	12	56	86	9	10	24	9	49	6
0-50 Employees	21 6.98% \$1544.	2 7.14% \$2562.	2 16.67% \$1187.	2 16.67% \$1700.	8 14.29% \$1500.	4 3.53% \$ 762.	- - -	- - -	- - -	1 11.11% \$1650.	2 4.08% \$1300.	- - -
51-150 Employees	8 2.66% \$1300.	1 3.57% \$1000.	- - -	- - -	2 3.57% \$1375.	2 2.35% \$1325.	- - -	- - -	1 4.17% \$1500.	- - -	2 4.08% \$1250.	- - -
151-500 Employees	25 8.31% \$1363.	- - -	2 16.67% \$1535.	1 8.33% \$1300.	12 21.43% \$1379.	4 4.71% \$1284.	- - -	1 10.00% \$1080.	1 4.17% \$1370.	1 11.11% \$1604.	3 6.12% \$1325.	- - -
501-5000 Employees	49 16.28% \$1361.	7 25.00% \$1316.	2 16.67% \$1519.	1 8.33% \$1665.	12 21.43% \$1386.	17 20.00% \$1349.	2 22.22% \$1185.	- - -	4 16.67% \$1414.	1 11.11% \$1580.	3 6.12% \$1213.	- - -
5000- 10,000 Employees	33 10.96% \$1330.	1 3.57% \$1100.	2 16.67% \$1237.	2 16.67% \$1150.	3 5.36% \$1333.	12 14.12% \$1458.	1 11.11% \$1224.	2 20.00% \$1070.	1 4.17% \$1600.	- - -	8 16.33% \$1314.	1 16.67% \$1065.
Over 10,000 Employees	165 54.82% \$1406.	17 60.71% \$1330.	4 33.33% \$1379.	6 50.00% \$1390.	19 33.93% \$1401.	47 55.29% \$1410.	6 66.67% \$1309.	7 70.00% \$1351.	17 70.83% \$1412.	6 66.67% \$1550.	31 63.26% \$1456.	5 83.33% \$1386.

THE 301 RESPONDENTS WHO ARE EMPLOYED ARE NOW EMPLOYED BY THE FOLLOWING COMPANIES

Allen Bradley Company	2 E.E., 1 G.E., 1 Met. E.
American Can Company	1 G.E.
Analytics, Incorporated	1 E.E.
Applied Physics Laboratory, Johns Hopkins University	2 E.E., 1 G.E.
The Austin Company	1 C.E.
Babcock and Wilcox	1 E. Mech.
J. E. Baker Company	1 Cer. E.
Michael Baker, Jr., Incorporated	1 Ag. E.
Bechtel Corporation	1 C.E., 1 G.E., 1 M.E.
Bell Systems: (23)	
American Telephone & Telegraph	1 I.E.
Bell Laboratories	4 E.E.
Illinois Bell Telephone Company	8 E.E., 1 C.E., 1 G.E., 1 I.E., 1 E. Mech.
Western Electric Company	2 Cer. E., 2 E.E., 1 I.E., 1 M.E.
Boeing Company	1 A.A.E.
Borg Warner Corporation, Spring Division	1 E. Mech.
Branecki-Virgilio & Associates	1 C.E.
Briggs and Morgan	1 G.E.
Brunswick Corporation, Sherwood Medical Industries	1 M.E.
Bunker Ramo Corporation	1 E.E.
CF Industries	1 E.E.
CTS Corporation	1 Cer. E.
Carolina Power & Light	1 A.A.E.
Carrier Corporation	1 A.A.E.
J. I. Case	1 Ag. E.
Caterpillar Tractor Co.	1 Ag. E., 1 C.E., 1 G.E., 4 M.E.
Chicago Bridge & Iron Company	2 C.E., 1 G.E.
Chicago, City of: (3)	
Board of Education	1 Cer. E.
Chicago Metropolitan Sanitary District	1 C.E.
Chicago Mass Transit District	1 C.E.
Chicago Tribune	1 G.E.
Chrysler Corporation	1 A.A.E., 2 M.E.
Collins Radio Company	1 E.E.
Commonwealth Edison Company	2 E.E., 1 Met. E.
Consupak, Incorporated	1 M.E.
Control Data Corporation	1 E.E., 1 G.E.
Crest Engineering, Incorporated	1 C.E.
Dames & Moore	1 C.E.
John Deere Dubuque Works	1 M.E.
E. I. Du Pont Company	1 M.E.
Elkhart Community Schools	1 A.A.E.
Emerson Electric Company	1 E.E.
Erico Products, Incorporated	1 C.E.

THE 301 RESPONDENTS WHO ARE EMPLOYED ARE NOW EMPLOYED BY THE FOLLOWING COMPANIES (Continued)

Esco Corporation	1 M.E.
Esso Production Research Company	1 A.A.E.
FMC Corporation	1 I.E.
FMC Corporation, Environmental Equipment Division	1 C.E.
FS Services, Incorporated	1 Ag. E.
Fairchild Semiconductor	1 Cer. E.
Farming-Self-employed	1 A.A.E.
Farr Company	1 E. Mech.
Felt Products Manufacturing Company	1 I.E.
Florida Department of Transportation	1 C.E.
Ford Motor Company	1 A.A.E., 4 M.E., 1 E. Mech., 1 Ag. E.
Francis Farms	1 Cer. E.
Freedom Electronix	1 E.E.
GTE Corporation	
GTE Automatic Electric	2 E.E., 1 I.E.
GTE General Telephone Company of Florida	1 E.E.
G & W Electric Specialties Company	1 E.E.
General American Transportation	1 E.E.
General Electric Company	1 A.A.E., 1 E. Mech., 3 M.E.
General Motors Corporation	
Chevrolet Division	2 Ag. E., 1 M.E.
Electro Motive Division	1 G.E.
Oldsmobile Division	1 M.E.
Saginaw Steering Gear Division	1 Met. E.
General Tire & Rubber	1 E.E.
Globe Union	1 Cer. E.
Great Lakes Steel Corporation	1 G.E.
Hallicrafters	1 E.E.
Hamilton Standard	1 M.E.
Harris Corporation, Gates Division	1 E.E.
Henco Electronics	1 E.E.
Hewlett-Packard	2 E.E., 1 E. Phys.
Holz Construction Company	1 C.E.
Honeywell, Incorporated	1 E. Phys., 1 M.E.
Honeywell Aerospace Incorporated	1 E.E.
Hubbell Corporation	1 A.A.E.
Hughes Aircraft Company	1 E.E., 1 M.E.
IBM	1 Cer. E., 2 E.E.
IIT Research Institute	1 A.A.E.
Illinois Power Company	2 E.E., 1 M.E.
Illinois, State of: (7)	
Department of Transportation	5 C.E.
Division of Aeronautics	1 C.E.
Environmental Protection Agency	1 A.A.E.

THE 301 RESPONDENTS WHO ARE EMPLOYED ARE NOW EMPLOYED BY THE FOLLOWING COMPANIES (Continued)

Indiana Metal Craft Corporation	1 Cer. E.
Ingersoll Rand Company	1 G.E.
Inland Ryerson Construction Products	1 C.E.
Intel Corporation	1 Cer. E.
Interlake, Incorporated	1 Met. E.
International Harvester	1 M.E., 1 Met. E.
Iowa-Illinois Gas & Electric	1 E.E.
Jewell Company, Incorporated	1 E. Mech.
Johnson & Johnson	1 A.A.E., 1 M.E.
Kankakee, City of	1 C.E.
Kankakee Community College	1 E. Phys.
Koppers Company, Incorporated	2 C.E.
Eli Lilly & Company	1 I.E.
Litton Industries, Data Systems	1 E.E.
Lockheed Missiles & Space	1 E. Phys.
Los Alamos Scientific Laboratories	1 E.E.
Mack Trucks, Incorporated	2 M.E.
The Magnavox Company	1 E.E.
Martin-Marietta Corporation	2 A.A.E.
McDonnell Douglas Corporation:	
McDonnell Douglas Aircraft, St. Louis	1 A.A.E.
McDonnell Automation Company	1 E. Phys.
Douglas Aircraft Company	3 A.A.E.
Arthur G. McKee & Company	1 C.E.
McKinsey & Company, Incorporated	1 E.E.
Monsanto Company	1 E.E.
Morgan Design	1 C.E.
Morton Buildings, Incorporated	1 Ag. E.
Mostek Corporation	1 E.E.
Motorola, Incorporated	3 E.E., 1 M.E.
Motorola Government Electric Division, Scottsdale	1 A.A.E.
Motorola Semiconductor	4 E.E.
National Gypsum Company	1 A.A.E.
National Semiconductors	2 E.E.
Natkin & Company	1 M.E.
Natural Gas Pipeline Company of America	1 Ag. E.
Nelson, Haley, Patterson & Quirk, Incorporated	1 C.E.
Newport News Shipbuilding	1 E.E.
Norcon Electronics Laboratories, Incorporated	1 E.E.
Northwestern University Medical School	1 E.E.
Norton Company	1 Cer. E.
Offshore Power Systems	1 E.E.
Ohio State University	1 E.E.
Olin Corporation, Brass Division	1 M.E.
W. E. O'Neil Construction Company	1 C.E.

THE 301 RESPONDENTS WHO ARE EMPLOYED ARE NOW EMPLOYED BY THE FOLLOWING COMPANIES (Continued)

Oriental Rug Gallery of St. Louis	1 M.E.
Orr International Corporation	1 C.E.
Outboard Marine Corporation	2 M.E.
PHD, Incorporated	1 M.E.
P & W Engineers, Incorporated	1 M.E.
Panduit Corporation	1 M.E.
Park Ridge, City of	1 C.E.
Ralph M. Parson Company	1 E.E.
Performance Real Estate	1 M.E.
Philco/Ford Corporation	1 A.A.E.
Proctor & Gamble	1 C.E., 1 G.E., 1 M.E.
Pullman, Incorporated, Trailmobile Division	1 C.E.
Raytheon Company	1 E.E., 1 M.E.
Renwick & Associates, Incorporated	1 C.E.
Rexnord, Incorporated	1 M.E.
Rockford Automation, Incorporated	1 E.E.
Rockford Black Top Construction Company	1 C.E.
Rockwell International	1 A.A.E., 1 G.E.
Rockwell International, B-1 Division	1 A.A.E.
Rockwell International MGD Graphics	1 C.E., 1 E.E.
Rockwell International Space Division	1 A.A.E.
Rutenberg/Arbor Corporation	1 C.E.
SKF Industries, Incorporated	1 A.A.E.
San Diego, City of	1 C.E.
Sargent & Lundy Engineers	2 C.E., 1 E.E.
Schaumburg Auto Parts	1 I.E.
Schaumburg, Village of	1 C.E.
Scientific Atlanta	1 E.E.
Searle Radiographics, Incorporated	1 E.E.
Dranke Sheahan/Stewart Dougall	1 Ag. E.
Shell Development Company	1 C.E.
Shell Oil Company	1 C.E.
Shure Brothers, Incorporated	1 E.E.
Sidley and Austin	1 E.E.
Simpson Timber Company	1 E.E.
Singer, Kearfett Division	1 E.E.
Skokie Department of Public Works	1 C.E.
A. O. Smith Corporation	1 Ag. E.
Soil and Materials Engineers of Florida, Incorporated	1 C.E.
Soil Enrichment Materials Corporation	1 C.E.
Square D Company	1 G.E.
A. E. Staley Manufacturing Company	1 C.E.
Standard Oil Company of California	1 C.E.
State Farm	1 E. Phys.

THE 301 RESPONDENTS WHO ARE EMPLOYED ARE NOW EMPLOYED BY THE FOLLOWING COMPANIES (Continued)

Sundstrand Aviation, Machine Tool Division	1 A.A.E.
E. A. Swanson	1 G.E.
TRW Systems	1 A.A.E., 1 G.E.
Texaco, Incorporated	1 C.E., 1 G.E.
Texas Instruments	1 E.E., 2 E. Phys.
Arnold Thompson Associates	1 C.E.
Trane Company	1 E. Mech., 1 M.E.
Turbodyne Corporation	1 M.E.
United Aircraft Corporation	1 M.E., 1 Met. E.
United Engineers & Constructors	1 C.E.
U. S. Government: (10)	
U. S. Army Construction Engineering Research Laboratory	1 I.E., 1 M.E.
U. S. Department of Health, Education and Welfare	1 G.E.
U. S. Naval Avionics Facility	2 E.E.
U. S. Naval - Mare Island Shipyard	1 G.E.
U. S. Naval Department	1 C.E.
U. S. Naval Fleet Missiles Systems	1 E.E.
NOAA/ERL-WPL, Department of Commerce	1 E.E.
U. S. Patent Office	1 G.E.
U. S. Industrial Chemicals Company	2 M.E.
University of Illinois, Computing Services Office	1 E.E., 1 E. Phys.
Volumes of Fun Games	1 Ag. E.
Washington, State of:	
Department of Ecology	1 C.E.
Westinghouse Electric Corporation	3 E.E., 1 E. Mech., 1 E. Phys., 2 G.E.
S. M. Wilson and Company	1 C.E.
Wisconsin Department of Natural Resources	1 C.E.
Wisconsin Electric Power Company	1 E.E.
Xerox Corporation	1 C.E.

PRESENT FIELD OF PRIMARY RESPONSIBILITY OF THE 1969 GRADUATES

Field	All Engineers	Percent	1974 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Design & Development	58	19.27%	\$1321.	7 \$1288.	4 \$1420.	1 \$1200.	3 \$1348.	24 \$1312.	1 \$1265.	-	-	-	17 \$1320.	1 \$1490.
Project Engineering	39	12.96%	1354.	6 1377.	-	2 1267.	13 1346.	7 1282.	1 1120.	-	3 1425.	4 1470.	3 1424.	-
Management or Administration	28	9.30%	1473.	3 1419.	-	-	9 1547.	8 1506.	1 1550.	-	3 1342.	1 1550.	2 1240.	1 1410.
Design	22	7.31%	1464.	-	3 1506.	-	6 1479.	6 1552.	1 1175.	1 1387.	1 1370.	-	4 1394.	-
Development	17	5.65%	1371.	2 1205.	-	3 1448.	-	3 1418.	2 1258.	3 1389.	-	-	3 1464.	1 1230.
Sales	17	5.65%	1573.	-	-	1 1300.	4 1417.	5 1685.	-	-	3 1340.	-	4 1832.	-
Systems Engineering	13	4.32%	1281.	-	1 1530.	-	-	9 1224.	-	-	3 1372.	-	-	-
Computer Software	12	3.99%	1282.	1 1400.	-	-	1 1485.	4 1244.	-	4 1148.	2 1468.	-	-	-
Construction	10	3.32%	1304.	-	-	-	8 1302.	-	-	-	-	-	2 1312.	-
Field Engineering	10	3.32%	1341.	1 1208.	1 1080.	-	1 1400.	5 1435.	1 1350.	-	-	-	1 1220.	-
Research	9	2.99%	1361.	3 1331.	-	-	1 1280.	3 1091.	-	-	-	1 2300.	1 1400.	-
Testing	9	2.99%	1297.	3 1166.	-	-	-	1 1330.	-	-	1 1725.	-	4 1281.	-
Company Owner	8	2.66%	1993.	1 4000.	1 1000.	2 1700.	1 1600.	1 3000.	-	-	-	1 1650.	1 1300.	-
Consulting	7	2.33%	1420.	-	1 1375.	-	5 1433.	1 1400.	-	-	-	-	-	-
Production	7	2.33%	1465.	-	-	1 1410.	-	1 2100.	-	-	1 1300.	1 1155.	3 1430.	-

(Continued on following page.)

PRESENT FIELD OF PRIMARY RESPONSIBILITY OF THE 1969 GRADUATES (Continued)

Field	All Engineers	Percent	1974 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Manufacturing	6	1.99%	\$1331.	-	-	-	-	1 \$1040.	1 \$1250.	1 \$1450.	2 \$1382.	-	1 \$1482.	-
Teaching	4	1.33%	1224.	1 \$1000.	-	1 \$1219.	-	1 1600.	-	1 1080.	-	-	-	-
Marketing	4	1.33%	1292.	-	-	1 1600.	-	1 1281.	1 1224.	-	-	-	-	1 1065.
Service	3	1.00%	1098.	-	1 \$1286.	-	1 \$1200.	1 810.	-	-	-	-	-	-
Operations Research	2	.66%	1602.	-	-	-	-	-	-	-	1 1600.	1 1604.	-	-
Quality Control	2	.66%	1400.	-	-	-	-	-	-	-	-	-	-	2 1400.
Planning	2	.66%	1492.	-	-	-	1 1304.	1 1680.	-	-	-	-	-	-
Law	2	.66%	1450.	-	-	-	-	1 1400.	-	-	1 1500.	-	-	-
Analysis	2	.66%	1375.	-	-	-	1 1238.	1 1512.	-	-	-	-	-	-
Patents	2	.66%	1473.	-	-	-	-	1 1667.	-	-	-	-	1 1280.	-
Plant Engineer	1	.33%	1448.	-	-	-	-	-	-	-	1 1448.	-	-	-
Product Engineering	1	.33%	1640.	-	-	-	-	-	-	-	-	-	1 1640.	-
Buyer	1	.33%	1352.	-	-	-	-	-	-	-	1 1352.	-	-	-
Purchasing	1	.33%	1550.	-	-	-	-	-	-	-	-	-	1 1550.	-

(Continued on following page.)

PRESENT FIELD OF PRIMARY RESPONSIBILITY OF THE 1969 GRADUATES (Continued)

Field	All Engineers	Percent	1974 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
Cost Engineering	1	.33%	\$1700.	-	-	-	-	-	-	-	1 \$1700.	-	-	-
Regulatory Functions	1	.33%	1442.	-	-	-	1 \$1442.	-	-	-	-	-	-	-
Totals Average Salary	301	100.00%	\$1394.	28 \$1394.	12 \$1372.	12 \$1417.	56 \$1402.	86 \$1373.	9 \$1272.	10 \$1267.	24 \$1422.	9 \$1571.	49 \$1395.	6 \$1332.

HOW MANY ENGINEERS AND SCIENTISTS WORK IN THE ORGANIZATIONAL UNIT
TO WHICH YOU BELONG IN YOUR CURRENT MAJOR POSITION?

	All Engineers	Aero. E.	Ag. E.	Ceram. E.	Civil E.	Elec. E.	E. Mech.	E. Phys.	Gen. E.	Ind. E.	Mech. E.	Met. E.
None	27 8.97%	2 7.14%	2 16.67%	3 25.00%	4 7.14%	7 8.24%	1 11.11%	1 10.00%	4 16.67%	2 22.22%	1 2.04%	- -
1-3	65 21.59%	6 21.43%	3 25.00%	- -	18 32.14%	15 16.47%	2 22.22%	2 20.00%	5 20.83%	2 22.22%	11 22.45%	1 16.67%
4-10	79 26.25%	2 7.14%	2 16.67%	4 33.33%	16 28.57%	28 32.94%	3 33.33%	1 10.00%	5 20.83%	1 11.11%	15 30.61%	2 33.33%
11-20	49 16.28%	5 17.86%	- -	3 25.00%	9 16.07%	13 15.29%	- -	2 20.00%	6 25.00%	3 33.33%	8 16.33%	- -
21-50	39 12.96%	3 10.71%	1 8.33%	2 16.67%	4 7.14%	14 16.47%	2 22.22%	2 20.00%	2 8.33%	- -	7 14.29%	2 33.33%
51-100	17 5.65%	4 14.29%	3 25.00%	- -	2 3.57%	2 2.35%	- -	1 10.00%	- -	- -	4 8.16%	1 16.67%
101-300	19 6.31%	5 17.86%	- -	- -	2 3.57%	5 5.88%	1 11.11%	1 10.00%	1 4.17%	1 11.11%	3 6.12%	- -
Over 300	6 1.99%	1 3.57%	1 8.33%	- -	1 1.79%	2 2.35%	- -	- -	1 4.17%	- -	- -	- -
Total	301	28	12	12	56	86	9	10	24	9	49	6

QUESTION CONCERNING THE VALUE OF ADDITIONAL DEGREES

QUESTION: Rank in order (1, 2, 3) the value of additional degrees which you feel would be the most valuable to you.

	Order of Importance		
	1st	2nd	3rd
M.B.A.	137 45.51%	55 18.27%	31 10.30%
Ph.D. in Other Technical Field	37 12.29%	47 15.61%	51 16.94%
Ph.D. in Original Field	34 11.29%	53 17.61%	42 13.95%
Law	30 9.97%	57 18.94%	54 17.94%
M.S. in Other Technical Field	12 3.99%	17 5.65%	21 6.98%
M.S. in Original Field	11 3.65%	24 7.97%	28 9.30%
Other	14 4.65%	11 3.65%	19 6.31%
No Choice Listed	26 8.64%	37 12.29%	55 18.27%
Total	301	301	301

QUESTIONS CONCERNING PRESENT POSITIONS AND ITS RELATION TO THEIR UNDERGRADUATE DEGREES

QUESTION: To hold your present position, is it important for you to have an engineering degree?

Yes	250	83.06%
No	51	16.94%
Total	301	100.00%

QUESTION: How much knowledge and skill, related to your undergraduate degree, do you apply in your present position?

Most or all	67	22.26%
Some	154	51.16%
Very little	61	20.27%
None	19	6.31%
Total	301	100.00%

QUESTION: On the average, how many hours do you spend on your job each week?

30 hours or less	5	1.66%
31-40 hours	88	29.24%
41-45 hours	125	41.53%
46-50 hours	51	16.94%
51 or more hours	32	10.63%
Total	301	100.00%

QUESTION: If you have not received an advanced degree and are not working toward one, do you feel that this has been a limiting factor in your progress with your company in your work?

Yes	11 ¹	3.65%
No	125	41.53%
No Answer	165	54.82%
Total	301	100.00%

¹Reasons given by the 11 who answered "yes":

4--No reason given.

"Attitude of companies that M.S.'s and Ph.D.'s are 'experts' when the particular problem could be handled by project engineer."

"I would estimate that over half the people who get promotions in my company are M.B.A.'s."

"An M.B.A. would help for management advancement."

"No company will hire unless you have the degree in their specific field."

"The engineering department at _____ is so small that to advance either within the department or within the company one needs to have a knowledge of some other field or be really outstanding or knowledgeable in his own field."

"Advancement would be somewhat faster with a M.S."

"There are few non-Ph.D.'s in a research and development company."

QUESTION CONCERNING UNDERGRADUATE CURRICULUM

QUESTION: If you had it to do all over again, would you choose:

180	59.80%	A specialized undergraduate engineering curriculum (e.g., M.E., E.E., etc.)
50	16.61%	A common undergraduate engineering curriculum (no specilization)
35	11.63%	Another type of undergraduate professional curriculum (e.g., pre-law, medicine)
13	4.32%	A business administration curriculum
12	3.99%	Other
7	2.32%	Another type of curriculum in mathematics or physical science (e.g., phys., chem.)
<u>4</u>	<u>1.33%</u>	A liberal arts curriculum
301	100.00%	Total

QUESTIONS CONCERNING RECOMMENDATION

QUESTION: Based on the engineering field as you see it, would you encourage a capable high school student to choose engineering as a career?

Yes	250	83.06%
No	46	15.28%
No Answer	4	1.33%
Yes and No	<u>1</u>	<u>.33%</u>
Total	301	100.00%

QUESTION: Has your work in the field of engineering been personally satisfying?

Yes	240	79.73%
No	41	13.62%
No Answer	19	6.32%
Yes and No	<u>1</u>	<u>.33%</u>
Total	301	100.00%

QUESTIONS CONCERNING PROFESSIONAL DEVELOPMENT

QUESTION: Have you become registered as:

1. Professional Engineer	40	13.29%
2. Engineer-in-Training	79	26.25%
3. Structural Engineer	1	.33%
4. Surveyor	4	1.33%
5. None of the above	183	60.80%

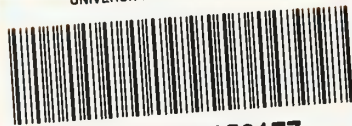
QUESTION: Have you participated in any company professional or management programs?

Yes	144	47.85%
No	155	51.49%
No Reply	<u>2</u>	<u>.66%</u>
Total	301	100.00%

QUESTION: Have you held an office in any of the following organizations?

1. Professional Organization	20	6.64%
2. School Board	1	.33%
3. Church	21	6.98%
4. Service Clubs	13	4.32%
5. Boy Scouts or Other Youth Groups	12	3.99%
6. Political	1	.33%
7. None of the above	246	81.73%

UNIVERSITY OF ILLINOIS-URBANA



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