



DEAN W. H. CARSON

Through the Dean's Eyes: A Look at the O.U. College of Engineering

Q: What is the enrolment in the College of Engineering?

A: According to the enrolment analysis of the University as submitted by the Office of Admissions and Records as of October 8, 1956, there were 3,051 students enrolled in engineering programs of study. Of this number 1,020 students were enrolled as freshmen engineers in the University College. The remainder is made up of 1,942 upperclassmen and 82 graduate students.

Q: Has there been an increase in enrolment during the past five years?

A: Yes, on October 12, 1951, the Office of Admissions and Records reported a total of 1,559 students enrolled in engineering programs. These students were classified as follows: 359 freshmen, 1,152 upperclassmen, and 48 graduate students. The 5-year period shows a gain of 1,492 students.

Q: Which are the three largest schools of the College of Engineering in order of their enrolment?

A: Petroleum Engineering, 329, Electrical Engineering, 260, Mechanical Engineering, 137. These figures do not include freshmen or graduate students.

Q: What are future enrolment prospects?

A: Considering the trend in industrial development, I am convinced there will be an ever-increasing demand for engineering graduates. To provide this supply we can expect the enrolment in engineering colleges to increase.

Q: Is the quality of the student body in-

creasing or decreasing with the increase of enrolment?

A: When considered on a percentage basis, I think the scholarship is about the same.

Q: Is the faculty of the College of Engineering undergoing an expansion to meet the growing student body needs?

A: We are undergoing a limited expansion of faculty—limited because we cannot pay comparable salaries to those paid by industry. Also the men we are looking for have the qualifications required for work in the rapidly expanding research laboratories. In addition to offering higher salaries, these laboratories can afford to buy every conceivable type of research apparatus. This is far from true in the case of the University. What housewife would take a makeshift kitchen in preference to one that is modern? There are four more persons in the College of Engineering than we had in 1951.

Q: What significant changes have taken place within the engineering faculty in the past year?

A: Some faculty members resigned and some have been appointed to our staff. Among our new faculty members is Dr. W. R. Upthegrove who was appointed to head up the new School of Metallurgical Engineering instituted this year. Another significant change was the appointment of Dr. George W. Reid as head of the newly organized Department of Sanitary Science

which now forms a part of the School of Civil Engineering.

Q: What effect, if any, is the present pay scale having on holding present faculty and recruitment of new faculty members?

A: Some of our better students who will receive a Bachelor of Science degree this June have been offered \$6,000 per year as starting salary. That is a higher salary than 40 per cent of our faculty receive. One student who will receive his Doctor of Philosophy degree in a short time has been offered a starting salary of \$8,000 per year. This differential in salary between education and industry is making it difficult to hold the present faculty and to attract other persons to the teaching profession.

Q: What are some significant faculty achievements during the past year?

A: I think the most significant achievements of the faculty have been to do a good job teaching and advising large number of students. In some areas faculty members have found time to do research and to prepare papers for presentation before national groups. Other extracurricular activities of faculty members have been organizing and conducting short courses and conferences.

Q: Are facilities adequate to handle present enrolment?

A: No. During the first semester, it was necessary to set up some classrooms in laboratories. In one case a class was held in the basement hallway. Graduate students are required, for the most part, to do their

An interview with Dean W. H. Carson, College of Engineering, produced these answers:

ASSETS: "A qualified faculty dedicated to the education of young men and women; a student body of fine young persons; a sound educational program; high scholarship standards and the traditions centered around St. Patrick."

WEAK SPOTS: "The major weak points are those brought about by overcrowded conditions, low salaries and lack of floor space."

research in undergraduate laboratories. We are bursting at the seams.

Q: Have facilities been added in the past five years to match the expanding enrolment?

A: No.

Q: What is needed for the expanding enrolment?

A: The University Administration has given a \$4,000,000 Engineering Center number one priority on its building program. This is what we need along with additional faculty members.

Q: What do you consider to be the number one priority for further expansion?

A: Now, that question is difficult to answer because all schools and departments of this College are operating in cramped quarters. Considering enrolment trends, I would give all of them number one priority.

Q: Is industry still as interested in the employment of engineers as it has been in recent years?

A: Yes. The old adage, "The greener pastures are across the fence," does not apply to the employment situation for engineering graduates. Job opportunities for this group of men and women are so numerous, the "pastures are green" everywhere and the fence situation does not enter into the picture.

We scheduled 275 interviews for 199 companies during the first semester of this school year. An even greater number of interviews has been scheduled for our en-

gineering students for the second semester. Some engineering students have reported at least a dozen employment offers. The engineering involved in each major field is so diversified that there is a place for all graduating engineers.

Q: Does the student who does not have a military obligation have an advantage, insofar as employment offers are concerned, over those who must go into service soon after they graduate?

A: Considering the overall employment picture, I would answer this question with a "No." Most companies consider military service for the young men of this country as an accepted fact, and offers military status of a man. There is no question about the long range requirements for engineers; therefore, company officials know that a man employed today will be needed two or three years hence, after he has fulfilled his obligation to Uncle Sam. Most engineers with military obligations, who have accepted employment, usually report to employers for a temporary assignment before being called into service.

Q: You mentioned that some students had as many as twelve offers of employment. How does a student go about eliminating these job opportunities until he gets down to the one he accepts?

A: Information concerning company operations, products, general policies, job location, training programs, and other pertinent details concerning careers, is made

available to the students. This, and personal conferences with company engineers, who come to conduct interviews, give the student the job knowledge which should enable him to select his career work in a logical manner.

We are not interested in just getting a job for graduates. We want each of these persons placed in a position which he is best qualified to fill.

Q: If a high school student asked for advice about entering the field of engineering, what would you tell him?

A: Each year I have conferences with many high school students who are interested in engineering as a career. The conferences usually last about 30 minutes. We talk about the transition from the home town high school to college, living one's life and not being influenced by others who are not on the campus for a serious purpose, student organizations, courses taken and grades made in high school, the freshman course of study in engineering, the student's major interest in engineering, grade requirements, the student's aptitude for mathematics and the sciences, whether or not the student has an inquisitive mind when it comes to consider things of a scientific nature, does he like to tinker with things of an electrical, mechanical or chemical nature, etc. After a conference such as this I can advise the student about his future educational program in a logical manner.

Q: What do you consider the strongest assets of the College to be?

A: A qualified faculty dedicated to the education of young men and women; a student body of fine young persons; a sound educational program; high scholarship standards, and the traditions centered around St. Patrick.

Q: What do you personally consider the major weak points in the College Program?

A: The major weak points are those brought about by overcrowded conditions, low salaries and lack of floor space.

Q: Does the field of engineering promise as much for the future as it has in the past few years?

A: Yes, it promises much more. The atomic age we are entering brings with it more social and engineering problems than the world has ever experienced in the past. Education, research and development will form the vehicles through which these problems will be solved. Educated persons, with a greater depth of social and technical competence, will lead the line of march to a better world in which to live.