Why Only an Engineer?

By J. W. Severinghaus, Arch. 4

Editor's Note—The following Tau Beta Pi essay was judged the best out of a group submitted prior to initiation. Mr. Severinghaus is a Senior in the Department of Architecture.

Among the various topics that were suggested as possible subjects of this essay, the rather general title "Why An Engineer" seemed to offer the possibility of discussing a subject which has been in the back of my mind for several years. I have taken the liberty to change that title to "Why Only An Engineer?"

The source of this whole discussion is found in the fact that in the courses offered by the departments of engineering not more than fifteen hours are allotted to elective subjects—subjects which may have no particular bearing on the engineering course pursued, but which have a particular interest for the individual student. The obvious result of such a schedule is that the engineering student is considered as rather apart from the rest of the University. He may have a splendid technical knowledge and a wealth of formulas at his disposal, but unless he has the initiative and time—and those of us who are taking engineering know how little extra time is available—to follow up some of his outside interests, a rather one-sided education is bound to be the result. I feel that a little more diversified educational policy would have a definite value, both from an economic standpoint and from the increased pleasure in living.

It is rather hard to deal in percentages in an abstract matter such as this, but I think that most of us are familiar with the statement on good authority that technical knowledge does not comprise more than twenty-five per cent of the qualities that enter into success. It is granted that this twenty-five per cent is essential, but the larger factor in success is in the personality of the individual—in his ability to mix with his fellow beings and find common interests; and as a result to be able to sell his ideas, not only because he is an efficient and capable engineer, but because he is in addition to that an interesting human being whose acquaintance is a real pleasure.

Over and above this purely economic consideration, there is the personal pleasure that one derives from knowing what is happening in the world about him, and feeling that he is in on some of its secrets. To be able to gaze at the heavens above and have a basic understanding of the movements of the celestial bodies and a sense of the time and space involved, to be able to watch the developments of nature and know something of the biological principles involved, to be able to look at the rock strata exposed in a ravine and read something of the prehistoric conditions of the country—all of these give one a very real self-satisfaction and make the world a far more intriguing place in which to live and perform our menial duties. I have illustrated briefly from the field of natural science, while similar pleasures may be found in the fields of literature, language, psychology, political science, history, et cetera. Of course it is impossible for the individual to be-

(Continued on Page 18)
WHY ONLY AN ENGINEER?
(Continued from Page 5)

come familiar with all the wealth of knowledge in the world today, but certainly more latitude is desirable than is possible in the strictly engineering courses.

As far as a remedy for the situation is concerned, I do not presume to pose as an educational authority. The only way that seems to be open is in the lengthening of the courses, for I realize that with the vast amount of technical knowledge available today it is increasingly difficult to condense the essentials into a four year course. And I further realize the objections that there are to lengthening the period of time that the individual must spend preparing for his field of work, but would it not be possible to have a pre-engineering course, just as we already have pre-medical and pre-law? I must admit that I have not reached any very satisfactory conclusions, but at least I have had the personal satisfaction of airing some of my thought—and perhaps someone will answer my question, "Why Only An Engineer?"