

## The Knowledge Bank at The Ohio State University

### Ohio State Engineer

- Title:** Engineer R. O. T. C. Unit
- Creators:** Thomas, William N. Jr.
- Issue Date:** Nov-1936
- Publisher:** Ohio State University, College of Engineering
- Citation:** Ohio State Engineer, vol. 20, no. 1 (November, 1936), 14-15.
- URI:** <http://hdl.handle.net/1811/35329>
- Appears in Collections:** [Ohio State Engineer: Volume 20, no. 1 \(November, 1936\)](#)

---

# ENGINEER R. O. T. C. UNIT

By MAJOR WILLIAM N. THOMAS, Jr.

**W**ITH the opening of the 1936 Fall Quarter there has been inaugurated at The Ohio State University an Engineer R. O. T. C. unit. Although the establishment of such a unit was proposed a number of years ago, it was not until last year that authorities of the War Department and the University agreed to establish a unit of the Engineer Arm of the Army. To assist the Professor of Military Science and Tactics in the organization and instruction of this unit the War Department has detailed to The Ohio State University from the Regular Army three officers of the Corps of Engineers and an infantry staff sergeant.

The primary general object of this course of instruction of the Reserve Officers Training Corps is to qualify students for positions of leadership in time of national emergency.

The complete course of instruction comprises four years, a compulsory basic course of two years and an elective advanced course of two years.

The object of the basic course is to give the student

knowledge of the fundamental training requirements of the army and to develop his initiative, confidence, and ability thus qualifying him, in case of emergency, to instruct untrained civilians in the duties of privates, corporals, and sergeants, and to train squads and sections for, and lead them in, combat.

The object of the advanced course is to qualify for a commission as a Second Lieutenant in the Officers Reserve Corps a number of selected students who have completed the basic course and who have demonstrated exceptional qualities of leadership, and who, in case of emergency, should be able to perform the duties of a platoon leader, and have received instruction in the duties of a company commander.

The mission of the Engineer R. O. T. C. is to produce qualified Second Lieutenants in the Engineer Reserve Corps.

In view of the fact that one of the qualifications for a commission as Second Lieutenant in the Engineer Reserve Corps is completion of a college course in engineer-

ing, only students pursuing a course leading to an engineering degree or an equivalent, will be enrolled in the advanced course Engineer R. O. T. C.

With these ends in view the regular enrollment in the basic course in the new Engineer unit is limited to students in the College of Engineering. Since there is also a Signal Corps R.O.T.C. unit at The Ohio State University and the military and civil educational and professional activities are parallel, the basic students electing courses in Electrical Engineering and Engineering Physics are enrolled in the Signal Corps unit. There are now enrolled in the Engineer unit approximately four hundred and fifty first-year basic students and three hundred second-year basic students. There will be added next year a first year advanced course and the following year a second year advanced course.

As the Engineer Unit develops the infantry unit will be discontinued. This year there are no students enrolled in the basic course Infantry and no students enrolled in the advanced course Engineers. As the first year advanced course is added in the Engineers, it will be discontinued in the Infantry and the same procedure will be followed in regard to the second year advanced course. To provide balanced training in leadership the advanced course Infantry men will act as the Cadet Officers for the basic course Engineers until there are advanced course students in the Engineers.

In the first year of the Engineer basic course students are taught the military fundamentals of the organization of the army; military discipline; courtesies and customs of the service; military sanitation and first aid; National Defense Act; Military History and Policy; Military obligations of Citizenship, and Current International Situation. Also included in this first year's instruction are leadership, consisting of drill and command, and basic military instructions in Rifle Marksmanship and Weapons and Musketry.

During the second year of the engineer basic course basic engineer instruction is given in the Organization and Duties of Engineers, in Rigging, and in Mapping. The latter includes Map and Aerial Photograph Reading, Military Sketching, and Map Making. Leadership is again taught in drill and instruction and courses of the combined first and second year classes. Preliminary combat training in Scouting and Patrolling, and in Combat Principles of the Rifle Squad is also given during this second year.

Classes in the basic course are of one hour duration and are held three hours each week for which the student receives one hours credit toward graduation in his academic course.

Upon successful completion of the compulsory two years engineer basic course, students whose academic and military standing are satisfactory may apply for enrollment in the voluntary two years engineer advanced course. If these applicants have demonstrated during the basic course potential qualities of leadership satisfactory to the Professor of the Military Science and Tactics, they will

be enrolled in the first year engineer advanced course, where the training will be more specialized along the lines of the field duties of military engineers.

In the first year of the advanced course the students will receive further drill and command training in Leadership as the Cadet Officer instructors of the engineer basic course students. They will be given instruction in the Military fundamentals of Interior Guard Duty, and the Care of Animals and Stable Management. Combat training will take up Tactics in the form of combat orders and Solutions of problems dealing with Engineers. There will be included training in the combat principles of infantry units and of Engineer Units, and in Mechanization. The advanced training will take up the subjects of the location and construction and the maintenance and repair of military roads, of military bridging in general and specifically in the use of floating bridges; of Military Explosives and Demolitions; and of Field Fortifications covering trenches, emplacements, obstacles, and protected shelters.

At the end of the first year engineer advanced course, the students are sent by the War Department to a six weeks military training camp where they receive training in the practical application of the subjects taken up at the university.

In the second year of the engineer advanced course the following subjects are taught: Leadership, in an advanced application of the method pursued in the same subject during the first year advanced course; military fundamentals of supply and mess management, and of the emergency procurement of property and the handling of funds; advanced engineer training in organization and duties of engineers; in construction in war, and in fixed military bridges; combat training dealing with the combat principles of the company, the organization of the ground, and in the defense against chemical warfare; military law and administration dealing with the law of military offenses, court martial, and administration; and advanced instruction in Military History and policy.

The engineer advanced course consists of five hours class work per week for which the student receives three hours credit toward graduation in his academic course. The training outlined is progressive and is designed to cover the maximum amount of ground in the limited time available. As many of the students do not take the advanced course, every effort is made to offer in the engineer basic course those phases of military training which will qualify the engineering college graduate for effective military engineer service in case of an emergency and, at the same time, offer instruction which will be of educational value in preparation for civil life.

Professor James R. Withrow, Chairman of the Department of Chemical Engineering, spent the summer months on an extensive tour through Europe, where he inspected various chemical industries, and gave numerous lectures. He served as Chairman of the Opening Session of the World's Congress of Chemical Engineers in London.