

Collection Guide: Engineering Education at IIT

Overview

As a technical university, IIT has been interested in not just teaching engineers, but also thinking critically about the methods and importance of engineering education. The graduates, faculty, and presidents of IIT, as well as predecessor Armour Institute of Technology and affiliate Midwest College of Engineering, have engaged in discussions about engineering education in multiple forums. Many IIT Presidents, particularly John Rettaliata, spoke and published on the topic. IIT has periodically hosted a national conference on engineering education, and has produced several radio and TV presentations. A World Congress on Engineering Education was held at IIT in 1965.

IIT's engineering program has often been at the forefront of engineering education. Armour Institute, IIT's predecessor, was one of the first American schools to award a Ph.D. in engineering in 1937. Armour Institute also offered the fairly unique Fire Protection Engineering degree in its early years. During WWII, IIT partnered with area universities to participate in the federal E.S.M.W.T. (Engineering Science Management War Training) Program and the Navy as part of the V12 program. In later years, IIT continued to experiment with new engineering curricula, including the E3 program, various minorities in engineering initiatives, and a professional development program at Rice Campus. The "Grinter Report," a report on engineering education conducted by ASEE and a seminal study in the field, was led by former IIT faculty member Linton E. Grinter in 1994.

The Midwest College of Engineering, which was formed in 1967 and merged with IIT in 1986, played a central role in developing an engineering program for professionals. The school was founded by IIT alum Dr. Alva Todd specifically to offer engineering classes to working adults in the western suburbs. After three degrees and many years in the private sector, Dr. Todd was convinced that new engineers needed a new education model- one in which they were treated as students but taught by those practicing in the field. The Midwest College of Engineering was intentionally located in the high-tech corridor in the western suburbs, and offered evening and weeknight classes. This focus on professional education was maintained after IIT acquired it in 1986, although the name changed first to first IIT West, and later Rice Campus.

Materials in UASC

Processed Collections

024.05.03 John T. Rettaliata Speeches

Typescripts of speeches given by Dr. Rettaliata during his presidency to both internal and external audiences. Titles including "engineering education" are as follows:

"Preparation for Engineering Education" Chicago Section of American Institute of Chemical Engineers, May 9, 1956

Illinois Institute of Technology
University Archives & Special Collections
Galvin Library, Chicago

“American Society for Engineering Education; “Education by Research Training”
Chicago Section of American Institute of Chemical Engineers; “Preparation for Engineering Education”
Edison Electrical Institute Engineering Education Conference; “Image of the Electric Industry: An Educator’s View”

024.05.06 *John T Rettaliata Position Papers*
"Educators Urged to Help Shape Men for the Year 2000," *The American Engineer*, March 1965

This was the first in a series of position papers in which Rettaliata discussed “specific areas in which a new age calls for new educational approaches.”

1998.069 *The American Scene Audio Tapes*
“The American Scene” audio tapes, a series of recordings produced by Illinois Tech to accompany a weekly television program broadcast on WNBC-TV (Chicago). Audio recordings were subsequently re-broadcast as radio programs on WMAQ (Chicago). See:
27) Science & Engineering Education, 1/31/1960.
87) Trends in Science & Engineering–Education, date unknown.

1998.211 *Minutes of the Illinois Institute of Technology’s Board of Trustees*
June 10, 1974: During the presidency of Maynard P. “Pete” Venema, IIT’s 3rd President, the E³ program , Education and Experience in Engineering, “the most successful new approach to engineering education in the country” which had be initiated in Sept. 1972 with financial assistance from NSF, was approved for three more years.

024.05.05 *John T Rettaliata Office Files*
Box 3, Folder 1, Points of Progress in the 1960s has information on the First World Congress on Engineering Education, held at IIT.

1998.132 *Technology and Human Affairs Collection*
1973, article about the First World Congress on Engineering Education, held sometime between 1961 and 1965 at IIT.

Press Releases

07/1953 Ivan L. Hill elected president of technical division of Am. Soc. for Engineering Education

06/1965 Engineering educators from Japan will meet with their American counterparts in a special conference on engineering education

Illinois Institute of Technology
University Archives & Special Collections
Galvin Library, Chicago

- 6/1965 Foreign consulate corps marks opening of World Congress of Engineering Education
- 2/3/1975 General Electric Foundation contributes \$25,000 to minority engineering education program

Armour Engineer and Illinois Tech Engineer Articles

Armour Engineer and Illinois Tech Engineer were serial publications of Armour Institute of Technology (1909 - 1940) and Illinois Institute of Technology (1940 - 1949) for faculty, students and alum with articles on both university activities and general topical interest.

Palmer, C.I. "Cultural aims in an engineering education." Vol 22, No 11, 1930. Pg. 10

Penn John, C. "Some notes on the aims of engineering education." Vol. 22, No.11, 1930. Pg.11

"A new development plan for engineering education." Vol. 23, No.03, 1932. Pg. 70

Heald, H. T. "Developments in engineering education at Armour." Vol. 26, 1935. Pg. 3

Enger, M. L. "Graduate study in engineering." Vol. 26, No. 5, 1935. Pg. 9

Potter, A. A. "Engineering and engineering education." Vol. 1, No. 10, 1935. Pg. 9

Kozacka, J. S. "Changes in shop courses for engineering students at Illinois Institute of Technology." Vol. 9, No. 10, 1943. Pg. 26

Glaves, C. R. "The importance of business subjects in the engineering curriculum." Vol. 9, No. 15, 1944. Pg. 5.

Bachrach, William. "The present and future of E.S.M.W.T. (Engineering Science Management War Training)." Vol. 10, No. 10, 1944. Pg. 22.

McCormack, Harry. "Our future engineers." Vol.11, No.12, 1945. Pg.16.

Kintner, R. C. "The five year gap." Vol. 11, No. 12, 1945. Pg. 21.

Ames, Alfred C. "Should humanistic-social study be made engineering education?" Vol. 11, No. 5, 1946. Pg. 12.

Grinter, L. E. "The education of engineers for Latin America." Vol. 12, 1947. Pg. 28.

Schrupp, E. U. "A Tale of two universities." Vol. 1, No.10, 1935. Pg. 15

Grinter, Linton E. "Relative values in European and American engineering education." Vol. 13, No. 12, 1947. Pg. 9.

Smith, Monroe A. "Jobs for engineers." Vol. 1, 1936. Pg. 7.

Illinois Institute of Technology
University Archives & Special Collections
Galvin Library, Chicago

Hobson, J. E. "War training courses in electrical engineering." Vol. 8, No. 5, 1943. Pg. 14.

Hoover, Blaine. "The engineer in government service." Vol.5, No. 5, 1940. Pg. 20.

For more information, contact archives@itt.edu or visit UASC, Galvin Library, 35 W 33rd St, Chicago, IL, Monday- Friday, 1pm-5pm.

Compiled January, 2011
Edits October 2015