

Proceedings
Enhancement of the Global Perspective for
Engineering Students by Providing an
International Experience

Engineering Conferences International

Year 2003

Lawrence Technological University -
Global Engineering Education Program

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Global Engineering Program

A world map with a blue-to-purple gradient background, showing the outlines of continents in a light blue color. The map is centered behind the text.

**LAWRENCE TECHNOLOGICAL
UNIVERSITY**

Global Engineering Education Program

Dr. Steven Howell, Mechanical Engineering Chair

**Prof. George Schneider, Jr. CMfgE, Director of Global
Engineering**

About Lawrence Tech

- Founded in 1932 as Lawrence Institute of Technology (LIT)
- Engineering Education for Working Professionals
- Motto: Theory and Practice
- Henry Ford Helped Shape LIT
 - First Location-Highland Park (next to Ford facility)
 - Space Donated by Henry Ford

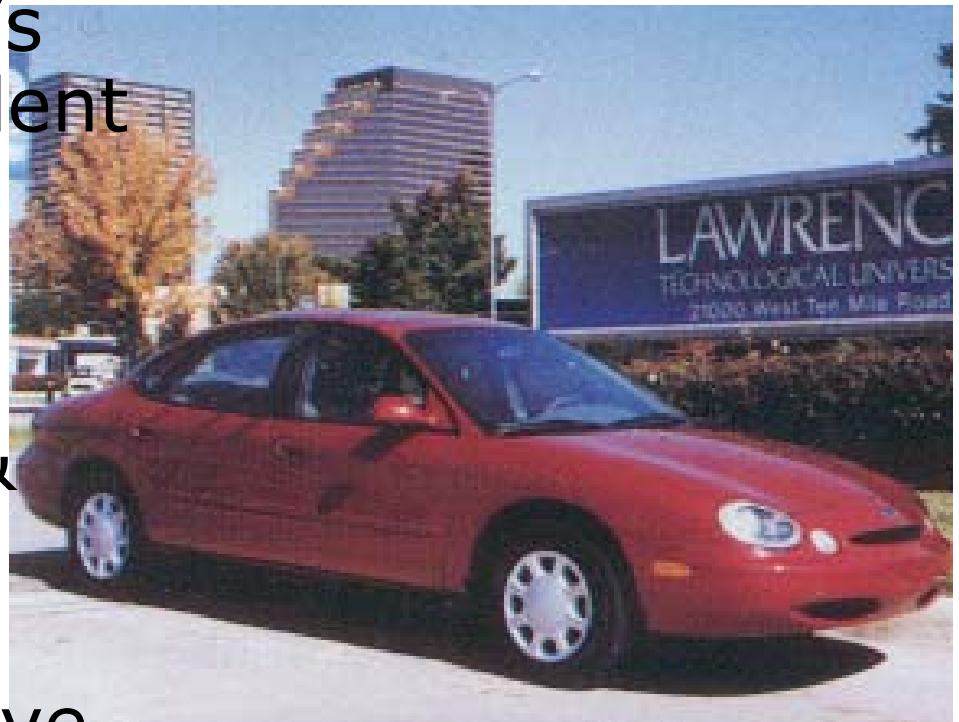
About LTU

- Comprehensive University with Focused Professional Programs
- 4 colleges
 - Architecture and Design
 - Arts and Sciences
 - Engineering and
 - Management



About LTU

- One of Michigan's largest independent universities
- ~5000 students
- Offers nearly 40 undergraduate & graduate degree programs
- Strong Automotive Engineering Focus



Global Engineering Program

LTU Campus and Students



Need and Opportunities

- Most products use components and subsystems that are internationally engineered and manufactured
- Future engineers will practice and work in an International Corporate Environment

Message from Industry

- In Oakland County there are over 130 German owned companies.
- The need for engineering graduates with international experience will continue to grow.
- Engineers with global experience will quickly move into leadership and management positions.

Program Goals

- Develop and implement a program that will produce engineers with international experience, including both the *practice* and *study* of engineering abroad.
- Program will be supported by both academia and industry

A Four Way Partnership

- Lawrence Tech – Home institution
- Fachhochschulen (*University of Applied Sciences*) – German partners
- Global companies – German location
- Detroit offices of Global Companies



Global Engineering Certificate (GEC) Program

- Foreign students enrolled at partner institutions are invited to study at LTU for one semester and work in industry for one semester.
- LTU co-op students are recruited to study and work abroad by enrolling in the GEC program.



GEC Program Description (continued)

- The GEC program provides study and work abroad for LTU co-op students in good standing at participating companies
- Corporate sponsored scholarship support is available to subsidize additional expenses of study abroad for top students
- GEC requires one academic year:
 - One semester of study abroad
 - One semester of work abroad

Global Engineering Program

Global Engineering Certificate Support

- The success of GEC program depends upon industrial support in accepting co-op students from Germany in US and US students in Germany
- Placement and financial support may be provided by global companies with engineering offices in both Germany and the Greater Detroit Area

GEC Financial Support

- Participating companies have been asked to support one exchange (both scholarship and placement):
 - LTU student to Germany
 - German student to LTU
- Allocation of scholarship funds is determined by LTU Financial Aid Office

GEC Supporting Companies (1/2003)

- *Automation Alley* (Oakland County economic development agency)
- *Gehring L.C.* (Farmington Hills)
- *Visteon Automotive Systems* (Plymouth)
- *Heller Machine* (Troy)
- *Behr* (Troy)



GEC Student Participation

- Application to LTU's Global Engineering Program
- Review of
 - Co-op (internship) program status including employer recommendations
 - Recommendation from academic advisor
 - Academic program status

Going to Germany (LTU students)

- Take “Conversational” German Course
- Make arrangements for housing, medical insurance, prepare budget, passport, etc. (assistance will be provided by international offices at German FH and LTU)

Going to Lawrence Tech (Deutsch students)

- Submit a cover letter stating your background and reasons for studying in the U.S.
- Include academic transcript of course of study (including English translation of courses and marks)
- Include work experience
- Copy of passport and statement from Bank of financial responsibility

Global Engineering Program

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