

Lehigh University
American Institute of Steel Construction
PROGRAM

SUMMER COURSE:

Plastic Design in Structural Steel

FRITZ ENGINEERING LABORATORY
CIVIL ENGINEERING DEPARTMENT
LEHIGH UNIVERSITY
Bethlehem, Pennsylvania

WEDNESDAY, SEPTEMBER 7, 1955

- *9:00 A.M.**—Opening Remarks
 President Martin D. Whitaker, Lehigh University
 Mr. H. Buckley Dietrich, Vice President, A.I.S.C.
- 9:15 A.M.**—"Fundamental Concepts"—Bruno Thurlimann
- 10:30 A.M.**—"Flexure of Beams"—Lynn S. Eedle
- **1:15 P.M.**—Demonstrations:
 Testing Apparatus
 Coupon Test
 Control Beam—Plastic Hinge
- 4:30 P.M.**—Clambake (Buses leave Fritz Laboratory at 4:30 and return at 10:00 P.M.)

THURSDAY, SEPTEMBER 8, 1955

- 9:15 A.M.**—"Upper, Lower Bound Theorems"—Bruno Thurlimann
- 10:30 A.M.**—"Equilibrium Method of Analysis"—Robert L. Ketter
- 1:00 P.M.**—Tour of Lehigh Structural Steel Company
 (Buses leave Fritz Laboratory at 1:00; tour completed at 5:30 P.M.)

FRIDAY, SEPTEMBER 9, 1955

- 9:15 A.M.**—"Method of Virtual Displacement"—Bruno Thurlimann
- 10:30 A.M.**—"Application of Virtual Displacement Method"—Robert L. Ketter
- 1:15 P.M.**—Demonstrations:
 Continuous Beam Test
 Beam-Column Test

*All morning sessions are to be held in the Auditorium of Packard Laboratory.

**All afternoon demonstrations are to be held in the Fritz Engineering Laboratory.

SATURDAY, SEPTEMBER 10, 1955

(Open for informal discussion, etc.)

MONDAY, SEPTEMBER 12, 1955

- 9:15 A.M.**—"Application of Virtual Displacement Method" (Cont'd.) Bruno Thurlimann
- 10:30 A.M.**—"Calculation of Deflections"—Lynn S. Beedle
- 1:30 P.M.**—Tour of Bethlehem Steel Company
(Buses leave Fritz Laboratory at 1:30; tour completed at 7:00 P.M.)

TUESDAY, SEPTEMBER 13, 1955

- 9:15 A.M.**—"Modifications to Simple Plastic Theory"—Robert L. Ketter
- 10:30 A.M.**—"Connections, Design Details"—Lynn S. Beedle
- 1:15 P.M.**—Demonstrations:
Beam Test to Show Lateral Buckling
High Shear in Beams (display)
Beam - Column Connections (display)
Use of Models

WEDNESDAY, SEPTEMBER 14, 1955

- 9:15 A.M.**—"Problem of Structural Safety"—Robert L. Ketter
- 10:30 A.M.**—"Rules of Design"—Lynn S. Beedle
- 1:15 P.M.**—Demonstrations:
Beam Test with Center Concentrated Load (Effect on Buckling)
Corner Connection Test

THURSDAY, SEPTEMBER 15, 1955

- 9:15 A.M.**—"Analysis and Design Examples"—Bruno Thurlimann
- 10:30 A.M.**—"Analysis and Design Examples" (Cont'd.) Lynn S. Beedle
- 1:15 P.M.**—Demonstration:
Gabled Portal Frame
- 4:30 P.M.**—Adjournment