

IA 152. Fundamentals of Electronics (3) (Former IA 111B)

Prerequisite: IA 52. Basic electronic components and circuits including inductors, capacitors, alternating current circuits; resonance and filters; vacuum tubes and transistors; power supplies; measuring devices; oscillators; amplifiers. (lecture-lab)

IA 153. Advanced Electronics (3) (Former IA 111C)

Prerequisite: IA 152. Electronic systems and applications including basic transmitters, amplitude and frequency modulation transmitters and receivers; transistor applications; antennas; television. (lecture-lab; field trips)

IA 154. Industrial Electronics (3)

Prerequisite: IA 153. Industrial electronics systems analysis; applications of electronic circuits and devices to industrial process and machine control. (lecture-lab; field trips)

IA 156. Fundamentals of Electrical Machines (3) (Former IA 111A)

Prerequisite: IA 52. Power generation; energy conversion equipment; alternating and direct current motors and generators. (lecture-lab; field trips)

IA 158. Fundamentals of Electrical Power Distribution and Wiring (3) (Former IA 111D)

Prerequisite: IA 52. Electrical power distribution equipment and systems; industrial and residential wiring circuits, devices and systems; local and national electrical codes. (lecture-lab; field trips)

GRAPHIC ARTS AREA**IA 60. Basic Graphic Arts (3) (Former IA 26)**

Introduction to the graphic arts; hand composition, paper making, stereotype, rubber-stamp, thermography, marbling; experiences in relief printing methods; overview of entire printing industry. (lecture-demonstration; student projects, field trips)

IA 160. Advanced Graphic Arts (3) (Former IA 127)

Prerequisite: IA 60 or permission of instructor. Typographic layout and design; problems of book manufacture; principles of advertising layouts; hand, machine, and photographic typesetting methods; experience in running automatic printing press and typesetting machine. Field trips.

IA 162. Graphic Arts Crafts (2) (Former IA 128)

Various processes and media used in the graphic arts industry; creative and recreational aspect for the student; silk screen, linoleum block, flexography, intaglio, stereotype, papermaking, thermography, marbling, student projects. Field trips.

IA 164. Bookbinding (2) (Former IA 142)

Historical development of the book and its influence on our society; preparation for publication, methods of reproduction and materials used; projects in binding and rebinding; yearbook and textbook problems. Field trips.

IA 166. Graphic Reproduction Techniques (3) (Former IA 145)

Prerequisite: upper division student. For persons interested in the field of buying, selling or producing printed material. Processes of reproduction; types of publications; media, materials and equipment; technical problems in layout; legal problems; yearbook and in-plant publication reproduction. Field trips.