

**121. Automotive Engine Machining (3)**

Prerequisite: Ind A 74, 12 or 120. Advanced study of automotive engine machining including precision measurements, principles of engine operation, machining of engine components, crack detection, assembly procedures, lubricating and cooling systems. (field trips)

**122. Automotive Chassis Analysis (3)**

Prerequisite: Ind A 12. Advanced study of automotive chassis components including power transmission, brake systems, wheel suspension, air conditioning, lubricants theory and testing, body repair and refinishing. (field trips)

**124. Automotive Engine Diagnosis and Repair Procedures (3)**

Prerequisite: Ind A 12. Laboratory work with emphasis on engine trouble shooting, use of dynamometer and diagnostic equipment together with mechanical repair techniques. (technical reports)

**129. Automotive Chassis Diagnosis and Repair Procedures (3)**

Prerequisite: Ind A 12. Laboratory work with emphasis on chassis diagnosis and mechanical repair procedures. (technical reports)

**CRAFTS AREA****30. Plastics Technology (3)**

Introduction to the plastics field. Technical information on composition, characteristics and uses of plastics; equipment design principles and manufacturing processes. (field trips)

**34. Theatre Craft (3) (See Drama 34)****133. Industrial Crafts (2; max total 4)**

Creative and recreational experiences in craft media including plastics, leather, wood, metal, enamels; historical, cultural, technological information.

**134A-B. Advanced Theatre Craft (3-3) (See Drama 134A-B)****DRAFTING/DESIGN AREA****41. Industrial Design Graphics (3)**

Application of the fundamentals of industrial design graphics. Sketching, lettering, orthographic projection, working drawings, auxiliary views, dimensioning, developments, pictorial drawings, duplication; interrelationship to the design process.

**42. Architectural Drawing (3)**

Architectural drafting techniques and standards; progress from fundamentals to completing light construction working drawings, floor plans, elevations, details; application of city and county codes.

**43. Theory of Environmental Design (3)**

Environmental design theories and practices applied to architecture. Design process and elements of design used to analyze visual phenomena created by man-made structures. Critical evaluations as a basis for the formulation of value judgments in designing structures.

**44. Descriptive Geometry (3)**

Prerequisite: Ind A 41. Descriptive geometry as related to design processes. A nonmathematical approach to geometric magnitudes and the relationship between points, lines and planes in space. Application of these principles in solving a variety of technological design problems.

**136. Manufacturing Illustration (3)**

Prerequisite: Ind A 41 or permission of instructor. Practical application of the fundamentals of developing perspectives, isometric drawings, isometric projections, dimetric drawings, trimetric drawings, and the rotation of views in the preparation of detailed pictorial assembly drawings of machines and machine parts from a set of working drawings.