CONSTRUCTION TECHNOLOGY

Associate in Science Degrees

- Construction Technology - Associate in Science (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/construction-technology-as/)

Certificates of Achievement

- Construction Apprenticeship Readiness - Certificate of Achievement (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/construction-apprenticeship-readiness-certificate-achievement/)
- Construction Technology - Certificate of Achievement (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/construction-technology-certificate-achievement/)
- Home Remodeling - Certificate of Achievement (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/home-remodeling-certificate-achievement/)

Certificates of Completion

- Construction Apprenticeship Readiness - Certificate of Completion (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/construction-apprenticeship-readiness-certificate-completion/)
- Forklift Fundamentals - Certificate of Completion (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/forklift-fundamentals-certificate-completion/)
- Home Remodeling - Certificate of Completion (https://lbcc-public.courseleaf.com/degrees-certificates/construction-technology/home-remodeling-certificate-completion/)

CONST 15 3 units
Blueprint Reading for Construction Trade
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly CONST 215 and CARP 440. This course is designed to provide knowledge of blueprint reading as it relates to the construction and building industry. This course will cover the theory of orthographic projections, reading floor plans, section and elevation drawings, symbols and notations, scaling and dimensioning practices, reading blueprints for structural formation, electrical, mechanical, and plumbing drawings.
Transferable to CSU Only

CONST 50 3 units
Concrete Fundamentals
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 15 and CONST 230.
Grading: letter grade.
This course introduces students to concrete flatwork and foundations, hands-on surveying, forming and finishing concrete, poured-in-place reinforced concrete, concrete estimating, code requirements and blueprint reading for concrete.
Transferable to CSU Only

CONST 70 3 units
Cost Estimating
54 hours lecture
Recommended Preparation: CONST 15.
Grading: letter grade or pass/no pass.
Formerly CONST 270 and CARP 230. This course is designed for those individuals needing to produce accurate project estimates; topics will include interpreting project information from a detailed blueprint and processing it into a final detailed estimate.
Transferable to CSU Only

CONST 200 7 units
Construction Apprenticeship Readiness
108 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 211. This class prepares students to enter the Construction Trades in a variety of apprenticeship programs. Students who complete the Multi-Craft Core Curriculum (MC-3) earn the OSHA 10 certificate and also receive CPR and First Aid certification. The subjects covered include: physical agility, blueprint reading, industry awareness and opportunities in the crafts; introduction to the crafts and their tools (hand and power); tool safety; and the heritage of the American worker. Students will be taken on field trips to Apprenticeship Training Centers and will tour local job sites.

CONST 205 0.5 units
Forklift Fundamentals
9 hours lecture, 9 hours laboratory
Grading: pass/no pass.
Formerly FORK 801. Forklift Safety and Operation training will provide basic safety and operation of the forklift including lifting principles, load rating, stability, and operation techniques. Students will be required to have a valid California Driver's license to participate and be certified.

CONST 230 3 units
Carpentry Fundamentals
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 311. This course covers the fundamentals of the building trades. Topics of instruction include safety, building codes, construction mathematics, rough framing, concrete form work and placement, blueprint reading, and technical information on alternative "Green Technology" materials and methods of construction.

CONST 235 3 units
Residential Roof Framing
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 230.
Grading: letter grade or pass/no pass.
Formerly CARP 219. This course covers residential roof framing. Topics of instruction include roof structures, calculations and layout of various rafters, codes requirements, roof construction, and estimating.

CONST 240 3 units
Finish Carpentry
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 230.
Grading: letter grade or pass/no pass.
Formerly CARP 227. This course covers residential interior finishes. Topics of instruction include: drywall installation, taping and texturing; hanging doors and installing door hardware; installing trim, including baseboard, window and door casing, chair rail and wainscot and crown molding, flooring, interior design, estimating, and layout.

CONST 245 3 units
Residential Stairs
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 230.
Grading: letter grade or pass/no pass.
Formerly CARP 222. This course covers residential stairs framing. Topics of instruction include stair design, calculation, layout, and construction.

CONST 250 2 units
Home Remodeling Fundamentals
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415A. This course focuses on home improvement projects and introduces the student to basic home remodeling. Topics will include safety, building codes, obtaining building permits, trade related math, hand and power tools, techniques for installing or repairing plumbing fixtures, electrical repairs and upgrades, and energy saving concepts.

CONST 255 2 units
Home Remodeling-Basic Carpentry
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415B. This course focuses on home improvement projects and introduces and identifies the basic hand and power tools used for home remodeling projects. Topics include wood-framed floor systems, wall and ceiling components. The class will review the applicable building codes that deal with the removal of interior wall partitions. Practical instruction is given in the construction laboratory.

CONST 260 2 units
Home Remodeling-Interior Construction
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415C. This course in home remodeling covers interior sub-crafts. Topics of instruction include insulation, drywall, finish trim carpentry, installing cabinets, tile, estimating, and relevant codes. Practical instruction is given in the construction laboratory.

CONST 265 2 units
Home Remodeling-Exterior Construction
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415D. This course in Home remodeling covers exterior sub-crafts. Topics of instruction include exterior flashing, roofing, rain gutters, exterior siding, decks, patio and walks. Practical instruction is given in the construction laboratory.

CONST 275 3 units
Contracting Laws and Management
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly CARP 245. This course is designed for those with construction experience who wish to become contractors. Topics of instruction include the following: home improvement certification, contractor license law, labor laws, payroll deductions planning, management principles, lien laws, and business organization.

CONST 600 0 units
Construction Apprenticeship Readiness
108 hours lecture, 72 hours laboratory
Grading: non graded.
This class prepares students to enter the Construction Trades in a variety of apprenticeship programs. Students who complete the Multi-Craft Core Curriculum (MC-3) earn the OSHA 10 certificate and also receive CPR and First Aid certification. The subjects covered include: physical agility, blueprint reading, industry awareness and opportunities in the crafts: introduction to the crafts and tools (hand and power); tool safety; and the heritage of the American worker.

CONST 601 0 units
Introduction To Construction
9 hours lecture, 9 hours laboratory
Grading: non graded.
The introduction to construction will introduce students to the common construction tools, equipment, materials, safety, and practices in the construction industry. Lab will include hands-on projects to put these skills to use by building a small-scale project.

CONST 602 0 units
Exploring Construction
9 hours lecture, 9 hours laboratory
Grading: non graded.
This course is an exploration of construction tools and crafts. This course will allow the student to explore the basic safety requirements and tool utilization in the industry.

CONST 605 0 units
Forklift Fundamentals
9 hours lecture, 9 hours laboratory
Grading: non graded.
Forklift Safety and Operation training will provide basic safety and operation of the forklift including lifting principles, load rating, stability, and operation techniques. Students will be required to have a valid California Driver's license to participate and be certified.

CONST 606 0 units
Workplace Competency Skills
18 hours lecture
Grading: non graded.
This competency-based course will provide students an awareness of the skills needed to be successful in the construction industry. Topics include effective workplace communication, problem and conflict resolution, thriving in a diverse workforce, and being an effective team player.

CONST 615 0 units
Blueprint Reading for Construction Trade
54 hours lecture
Grading: non graded.
This course is designed to provide knowledge of blueprint reading as it relates to the construction and building industry. This course will cover the theory of orthographic projections, reading floor plans, section and elevation drawings, symbols and notations, scaling and dimensioning practices, reading blueprints for structural formation, electrical, mechanical, and plumbing drawings.

CONST 616 0 units
Home Remodeling-Drywall
9 hours lecture, 18 hours laboratory
Grading: non graded.
Formerly CONST 615B. This course in home remodeling covers technical instruction and practical experience for installing and repairing drywall in commercial and residential locations. Topics of instruction include, safety, tools, taping, spackling, compound and hanging techniques for drywall. Students will also learn how to differentiate between LEED approved and non-approved materials.

CONST 617 0 units
Home Remodeling-Tiling
9 hours lecture, 18 hours laboratory
Grading: non graded.
Formerly CONST 615A. This course in home remodeling covers technical instruction and practical experience for tiling, marble and granite installation. Topics of instruction include, safety, waterproofing, tiling floors, counter tops, and walls in ceramic, porcelain, marble, and granite and mortar floating. Practical instruction is given in a lab setting.

CONST 618 0 units
Home Remodeling-Painting
9 hours lecture, 18 hours laboratory
Grading: non graded.
Formerly CONST 615C. This course in home remodeling covers basic painting techniques. Topics of instruction include, safety, job site and surface preparation (e.g. cleaning, caulking, sealing); Proper tools; spray-painting equipment; ladder and scaffolding safety; applications to enhance the job through stripping, sponging, and distressing.

CONST 620 0 units
Plumbing Fundamentals
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 615 – Blueprint Reading.
Grading: non graded.
This course will provide students with entry level instruction involving the theory and skills of residential plumbing systems. Knowledge of basic principles, functions, design, and the physical ability to install and test rough-in plumbing in a single-family dwelling.

CONST 670 0 units
Cost Estimating
54 hours lecture
Recommended Preparation: CONST 615.
Grading: non graded.
This course is designed for those individuals needing to produce accurate project estimates; topics will include interpreting project information from a detailed blueprint and processing it into a final detailed estimate.

CONST 675 0 units
Contracting Laws and Management
54 hours lecture
Grading: non graded.
This course is designed for those with construction experience who wish to become contractors. Topics of instruction include the following: home improvement certification, contractor license law, labor laws, payroll deductions planning, management principles, lien laws, and business organization.