

Business Essentials for Engineering Professionals

(BEEP) Professional Certificate

Learn the practical business side of engineering not typically included in engineering or other technical degree programs.

Earn CEUs upon completion of each course while you are earning your professional certificate.

Total of 28 (contact hours) 2.8 CEUs – 11 courses • Online only
\$1,955 (includes framed certificate and program fee)

*BEEP Professional Certificate program must be completed within 3 years from the date of purchase.

Professional Certificates

Bridge Design and Evaluation: V15Q, V15R, V15S, V15T

Design Fundamentals of Erosion & Sediment Control Measures for

Construction Activities: V18K, V18L, V18M, V18N, V18P, V18Q

Electric Power System Protection: V05E, V05F, V05G, V05H, V05I, V05J

Electric Motors and Generators: V07F, V07G, V07H, V07J, V07K, V07L

Electrical Power Systems: V01F, V01G, V01H, V01J

Essentials of Effective Problem Solving: V17A, V17B, V17C, V17D, V17E

Internal QMS Auditor (ISO 9001:2015): V16N, V18B, V18C

Internal QMS Auditor (AS 9100): V16N, V17F, V18B, V18C

Internal QMS Auditor (IATF 16949): V16N, V17G, V18B, V18C

Leadership Essentials: V16A, V19A, V16D, V17C, V16H, V16R

Power Quality: V11J, V11K, V11L, V11M

Quality Management: V20A, V21J, V21K, V21M, V21N

Reinforced Concrete Design: V13G, V13H, V13J, V14Q

Risk Management: V16B, V16C, V16P, V16Q, V16R

Signals and Systems: V06J, V06K, V06L, V06M

Statistical Methods for Process Improvement: V20A, V20B, V20C, V20D, V20E

Fundamentals of Rocket Propulsion: V20M, V21G, V21H

*Professional Certificate programs must be completed within 2 years from the date of purchase.

Landscape Architects

Auburn is an approved provider for LA CES. Approved courses are listed on the website.

How Our Program Works

Place your order online or by phone.

- ▶ Courses are available online for streaming and download. Download and print workbook and supporting materials.
- ▶ Courses are also available on DVD-Rs and Video CDs. Workbook and supporting materials will be shipped to you along with DVD-Rs or CDs. Course numbers V08 and lower are on DVDs and course numbers V09 and up are on CDs.
- ▶ Exams: *Online format* – exams are taken online with immediate score. *DVD/CD course format* – exams are to be returned by mail, email, or fax.
- ▶ “Certificate of Completion” will be mailed to you for your records. The completion date on the certificate will be the date you complete the exam online or the postmark date your exam is mailed to our office for grading.
- ▶ To earn CEUs for individual courses you must submit your exam within one year from the original date of purchase.
- ▶ To pass you must answer 70 percent of the questions correctly for engineers and land surveyors, 80 percent for architects and 75 percent for landscape architects.

Licensing Requirements

Each course is cleared for a number of contact hours, which can readily be converted to Continuing Education Units (CEU), Professional Development Hours (PDH), Continuing Professional Competency (CPC) or Learning Units (LU). In addition, Auburn University has fully accredited colleges of engineering (ABET), business (AACSB) and architecture (NAAB).

An Educational Partner With PMI, IEEE, LA CES, NCBLA and NCAT

For a list of approved/accepted states for PEs and PLSs

NON – PROFIT
U.S. Postage
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Stone Mountain, GA
Permit #1176

Engineering Continuing Education

Samuel Ginn College of Engineering
217 Ramsay Hall
1161 W. Samford Ave., Building 8
Auburn, AL 36849-0001



Auburn University Engineering Professional Development



www.eng.auburn.edu/epd
epd@eng.auburn.edu • 1.833.419.8528

Auburn University is an equal opportunity educational institution/employer.

0720



2022 – 2023

AUBURN
UNIVERSITY

Samuel Ginn
College of Engineering

Continuing Education License Renewals

Courses specifically tailored for:

Engineers
Landscape Architects
Business Professionals
Managers
Surveyors
Architects
Contractors

- ▶ High-quality online video courses from the comfort of your home or workplace
- ▶ Content from experts
- ▶ View on your PC, Mac, tablet, or MP3 player



2022 – 2023 Course Offerings

Course descriptions and sample videos available at: www.eng.auburn.edu/epd

Delivery Methods:

Online or DVD

(DVD: \$20 additional materials fee)

Quantity discounts available:

10% discount for orders of 3-4 courses

20% discount for orders of 5 or more courses

Flat rate shipping and handling fee \$12

Shipped in 3-5 business days

(For next day shipping, place order by calling before 1 p.m. CST.)

1 Contact Hour = 0.1 CEU, 1.0 PDH or 1.0 CPC (1 CEU = 10 PDHs)

Place Your Order Today

Online: www.eng.auburn.edu/epd

Phone: 1.833.419.8528

Email: epd@eng.auburn.edu

Fax: 334.844.2519

Mail: Auburn University
Engineering Continuing Education
217 Ramsay Hall
Auburn, AL 36849 – 5391

Aerospace

		Hours	Online Cost
V20M	Rocket Propulsion I: Fundamentals of Expanding Gas Rockets NEW!	3	\$180
V21G	Rocket Propulsion II: Foundations of Solid Rocket Motor Analysis NEW!	3	\$180
V21H	Rocket Propulsion III: Liquid Propellant Rocket Propulsion NEW!	3	\$180

Civil and Landscape Architecture

V12D	Bicycle and Pedestrian Facilities	3	\$180
V12G	Design of Structural Steel Members using LRFD	6	\$360
V12E	Erosion and Sediment Control Using Geosynthetics	2	\$160
V08J	Foundations of Building	1	\$80
V12C	Fundamentals of Roadway Design	3	\$180
V08L	Geosynthetics - An Overview of Designs	1	\$80
V13P	Geotechnical Failure Lessons	1	\$80
V14C	Geotechnical Failures: Cases from the Field	1	\$80
V13N	Ground Improvement	4	\$240
V04L	Landfill: Basics of Design and Operation (FLSM #0006991)	6	\$360
V14M	Marine Spatial Planning: An Introduction to Protecting Our Oceans & Coastal Resources	1	\$40
V15K	Retaining Wall Design: Using Gabions	2	\$160
V16E	Reversing Urban Hydrology: Pervious Pavement	2	\$160
V14F	Rigid Retaining Wall Design: Geotechnical Aspects	5	\$300
V12F	Roundabouts 101	3	\$180
V00G	Soil Basics for Engineers (FLSM #0007647)	6	\$360
V08K	Soil Classification for Roads and Engineering	1	\$80
V06H	Soils for Pavements	6	\$360
V08A	Storm Water Drainage System Design	3	\$180
V08C	Storm Water Hydrographs and Their Use	3	\$180
V13C	Storm Water Infiltration Design with Pervious Concrete	4	\$240
V17H*	Temporary Traffic Control	4	\$240
V04K	Unpaved Low Volume Road Design, Construction and Maintenance	9	\$540

Design Fundamentals of Erosion & Sediment Control Measures for Construction:

V18K*	Erosion and Sediment Control: Rules and Regulations	1	\$80
V18L*	Erosion and Sediment Control: Erosion Control	1	\$80
V18M*	Erosion and Sediment Control: Sediment Control	1	\$80
V18N*	Erosion and Sediment Control: Managing Runoff	1	\$80
V18P*	Erosion and Sediment Control: Soil Loss Modeling	1	\$80
V18Q*	Erosion and Sediment Control: Site Planning and Management	1	\$80



NCAT (National Center for Asphalt Technology):

V13S	Accelerated Pavement Testing	1	\$40
V12J	Aggregate Properties and Testing	1	\$80
V10K	Asphalt Binder Tests and Specifications	2	\$160
V13A	Asphalt Mix Design	3	\$180
V10J	Hot Mix Asphalt Compaction	1	\$80
V10H	Hot Mix Asphalt Delivery and Placement	1	\$80
V10M	Hot Mix Asphalt Paving CS & QC Assurance	3	\$180
V10N	Pavement Management Systems	1	\$80
V13L	Sustainable Pavements: Part 1	4	\$240
V14J	Sustainable Pavements: Part 2	2	\$160
V15G	Sustainable Pavements: Part 3	2	\$160

Structural

		Hours	Cost
Bridge Design and Evaluation:			
V15Q	Bridge LRFD Design	2	\$160
V15R	Bridge Load and Steel Girders	2	\$160
V15S	Design of Steel and P/C Girders	2	\$160
V15T	Evaluation and Rating of Bridges	2	\$160

*Courses are available online only

DVD orders for 2022 must be placed by Monday, December 12, 2022.

Reinforced Concrete Design:

V13H	Reinforced Concrete Design: Development, Anchorage, and Lap Splices	3	\$180
V13G	Reinforced Concrete Design: Flexure and Shear	3	\$180
V13J	Reinforced Concrete Design: Axial Compression and Bending	2	\$160
V14Q	Reinforced Concrete Design: T-beams and Compression Reinforcement	2	\$160

Shallow Foundations:

V04H	Shallow Foundations: Part 1- Geotechnical Aspects of Shallow Foundation Design	3	\$180
V04J	Shallow Foundations: Part 2- Structural Design of Spread Footings	3	\$180

Mechanical

V15M	Introduction to Industrial Robotics	2	\$160
V15P	Mobile Robots: Design and Operation for Real World Applications	3	\$180
V15A	Review of Conduction and Radiation Heat Transfer	2	\$160
V15B	Review of Convection Heat Transfer	2	\$160
V15H	Understanding the Second Law of Thermodynamics for Gases	2	\$80

Transportation

V20F	Railroad Infrastructure & Mobility: Freight & Passenger	2	\$160
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Electrical

V12A	An Overview of Electric Power Systems Engineering	4	\$240
V16J	Commercial Nuclear Plant Regulation	2	\$160
V05A	Electrical Circuit Fundamentals for Power Applications	6	\$360
V20G	Fundamentals of Electric Power Engineering	24	\$1,440
V09A	Fundamentals of Operational Amplifiers	3	\$90
V08B	Power Electronics	6	\$180
V13B	Solar Power	3	\$180
V18R	Stepper Motors	2	\$160
V13D	Symmetrical Components	3	\$180
V07N	Transformers	3	\$90
V15F	The Smart Grid: A Primer	3	\$180
V12M	Wind Power (Revised)	3	\$180

Power Quality:

V11J	Power Quality: Fundamentals	3	\$180
V11K	Power Quality: 60 Hz Voltage Problems	3	\$180
V11L	Power Quality: Harmonics in Power Systems	3	\$180
V11M	Power Quality: Transients	3	\$180

Electric Power System Protection:

V05E	Part One – Fundamentals	3	\$180
V05F	Part Two – System Modeling	3	\$180
V05G	Part Three – Fault Calculations	3	\$180
V05H	Part Four – Hardware	3	\$180
V05I	Part Five – Component Protection	3	\$180
V05J	Part Six – Line Protection	3	\$180

Electric Motors and Generators:

V07F	Part One – Fundamentals	3	\$180
V07G	Part Two – Three-Phase Induction Machines	3	\$180
V07H	Part Three – Power Electronic Control	3	\$180
V07J	Part Four – Three-Phase Synchronous Machines	3	\$180
V07K	Part Five – DC Machines	3	\$180
V07L	Part Six – Single-Phase Induction Machines	3	\$180

Electrical Power Systems:

V01F	Part One – Fundamentals Review	3	\$180
V01G	Part Two – Power Distribution Systems	3	\$180
V01H	Part Three – Loads	3	\$180
V01J	Part Four – Protection	3	\$180

Signals and Systems:

V06J	Part One – Fundamentals	3	\$180
V06K	Part Two – Fourier Concepts	3	\$180
V06L	Part Three – Analog Transform Concepts	3	\$180
V06M	Part Four – Discrete Transform Concepts	3	\$180

Surveying

V08G	2007 National Readjustment of the North American Datum 1983 (FLSM #0007651)	3	\$180
V09D	Construction Surveying (FLSM #0004019)	4	\$240
V03A	Geodesy for Engineers and Surveyors (FLSM #0004029)	6	\$360
V12B	Great Surveyors and Their Surveys (FLSM #0008277)	3	\$180
V18G	Heavy Highway Construction Surveying Part 1	2	\$160
V18H	Heavy Highway Construction Surveying Part 2	3	\$180
V08F	History of The Government Land Office (FLSM #0007650)	3	\$180
V00D	History of Surveying Instruments: Impact and Accuracy (FLSM #0006989)	3	\$90
V05B	Improving Surveying Field Procedures using the Total Station (FLSM #0006990)	6	\$360
V18F	Professional Ethics for Land Surveyors (FLSM #0006287)	2	\$160
V13E	Retracing and Proofing Original GLO Section Corners (FLSM #0008492)	3	\$90
V06G	Role of Engineers/Surveyors in GIS (FLSM #0007376)	6	\$360

For group or corporate orders call 1.833.419.8528 or 334.844-5807

V01D	State Plane Coordinates (FLSM #0004034)	6	\$180
V07D	Surveying With GPS (FLSM #0007375)	5	\$300
V11N	The Art of Land Surveying (FLSM #0008103)	3	\$180
V00E	The Colonial Land System and The Building of America (FLSM #0004031)	3	\$90
V07A	The Pincushion Effect (FLSM #0007220)	3	\$90
V00F	The Rectangular Land System: Subdivision of Public Lands (FLSM #0004032)	3	\$90
V11B	The Use of Magnetic Instruments (FLSM #0008102)	3	\$180
V05C	Understanding Boundary Law, Case Law and Principles of Surveying Law (FLSM #0007219)	6	\$360
V01C	Vertical Datums and Leveling (FLSM #0004033)	6	\$180

Management, Ethics and Legal (New York state board will not approve courses in this section)

VBEEP*	Business Essentials for Engineering Professionals "Professional Certificate" – 28 hrs		\$1955
V10D	Business Ethics Module I (FLSM #0007648)	3	\$180
V10E	Business Ethics Module II (FLSM #0007649)	3	\$90
V02C	Buying or Selling an Engineering or Land Surveying Firm (FLSM #0006286)	3	\$180
V03H	Contract Administration: Change Order Basics	5	\$300
V10G	Contracts for Engineers and Surveyors (FLSM #0004021)	3	\$180
V14P	Decision Making Using Business Metrics	3	\$180
V10A	Effective Marketing of Professional Services for Engineers and Surveyors (FLSM #0004026)	3	\$180
V20K	Digital Marketing for Non-Marketing Professionals	3	\$180
V07B	Engineering Economic Analysis (FLSM #0006987)	3	\$180
V09C	Engineering Math	6	\$360
V14K	Essential Financial Skills: Part 1	3	\$180
V14T	Essential Financial Skills: Part 2	3	\$180
V10B	Establishing Your Engineering or Surveying Firm (FLSM #0004024)	3	\$180
V10F	Ethics and Professionalism (FLSM #0004023)	3	\$180
V21D	How to Change and Grow Your Engineering Revenue	2	\$160
V14W	Introduction to Occupational Ergonomics	1	\$40
V03D	On-Time: Project Scheduling Basics (FLSM #0006988)	5	\$300
V14N	Project Management	3	\$180
V14L	Selling and Negotiating for the Technical Professional	3	\$180
V12K	Technically Speaking: Presentation Skills For Engineers (FLSM #0008278)	2	\$160
V14H	Technically Speaking Part 2: Leadership Essentials for Engineers (FLSM #0008631)	2	\$160
V03G	Tort Liability and Ethics for Public Agencies	5	\$300
V14A	Writing Effectively: Written Communication Skills for Technical Professionals	2	\$160
ADA Transition Plans & Accessibility:			
V16F	ADA Self-Evaluations/Transition Plans	2	\$160
V16G	Overview of Elements of Public Right-of-Way Accessibility	2	\$160

Project Management

Varies	PMP Preparation Course NEW!	35	\$2,100
VPMP*	PMI Authorized PMP Exam Prep (online only) NEW!	35	\$999



Authorized Training Partner
Project Management Institute

Quality Management

V19A	Common Sense Leadership	2	\$160
V18A	Essentials of Energy Management	2	\$160
V18B	Essentials of Quality Systems Auditing (Based on ISO 19011)	2	\$160
V18D	Essentials of Measurement Systems Analysis	2	\$160
V16H	Managing Change: A Process Model that Works	1	\$80
V16A	Numbers to People	2	FREE
V16D	Ten Essentials: Common Sense Principles	2	\$160
V18C	Tips for Auditing ISO 9001, IATF 16949 and AS 9100 Quality Systems	2	\$160
V17F	Understanding AS 9100D	2	\$160
V17G	Understanding IATF 16949:2016	2	\$160
V16N	Understanding ISO 9001: 2015	2	\$160
V16T	Understanding ISO 14001: 2015	2	\$160
V21J	Introduction to Quality Management NEW!	1	\$80
V21K	Effective Quality Management Systems NEW!	2	\$160
V21M	Customers & Quality Planning NEW!	2	\$160
V21N	Seven Simple Tools for Quality Management NEW!	2	\$160

Essentials of Effective Problem Solving:

V17A	Effective Problem Solving Methods	2	\$160
V17B	Process Analysis for Problem Solving	1	\$80
V17C	Dealing with Human Error Problems	1	\$80
V17D	Tools for Problem Solving	2	\$160
V17E	Error-Proofing Essentials	1	\$80

Risk Management:

V16B	Risk Management Essentials	2	\$160
V16C	Risk Management: Tools and Techniques	2	\$160
V16P	Failure Mode Effects Analysis (FMEA)	2	\$160
V16Q	Managing Project Risk(s)	2	\$160
V16R	When Disaster Strikes- Contingency Planning	1	\$80

Statistical Methods for Process Improvement

V20A	Using Data for Process Improvement	2	\$160
V20B	Using Distributions for Process Improvement	1	\$80
V20C	Using Process Controls Charts	2	\$160
V20D	Using Data for Decision Making	2	\$160
V20E	Introduction to Statistically Designed Experiments	1	\$80