

# COURSE DESCRIPTIONS

## Courses are numbered as follows:

- 001 through 099 – Orientation and developmental courses
- 100 through 199 – Undergraduate credit
- 200 through 299 – Undergraduate credit; sophomore classification may be required.

Course numbers ending in "U" denote a lower-division university course which originated at a state-supported university. The course attribute identifies the originating university. Only KCTCS Colleges which have pursued approval may offer these courses. An example of this type of course is INF 120U Elementary Programming (3 credit hours).

Modular courses have four number or alpha characters with the first three numbers representing the parent course, e.g., CIT 1051 Computer Basics (0.5 credit hours) is the first module of CIT 105 Introduction to Computers (3 credit hours). The last character denotes the sequence of the module with either a numerical or alpha character. Course descriptions are published for recently approved courses, and those that have been offered in the preceding two-year period. Other active courses may be offered that are not published in the printed catalog.

- Pre-requisite – course which must be satisfactorily completed before enrolling in course - (example: ACC 201 Financial Accounting (3 credit hours) is a pre-requisite for ACC 202 Managerial Accounting (3 credit hours))
- Co-requisite – course which must be taken at the same time as another course - (example: ACR 101 Refrigeration Fundamentals Lab (2 credit hours) is a co-requisite for ACR 100 Refrigeration Fundamentals (3 credit hours))

Users of the printed KCTCS Catalog should visit <https://catalog.kctcs.edu/course-descriptions/> to see Course Descriptions.

A robust Course Search is also available online at <https://catalog.kctcs.edu/course-search/>

## #

- 3D Printing (DPT) (<https://catalog.kctcs.edu/course-descriptions/dpt/>)

## A

- Accounting (ACC) (<https://catalog.kctcs.edu/course-descriptions/acc/>)
- Accounting (ACT) (<https://catalog.kctcs.edu/course-descriptions/act/>)
- Advanced Industrial Integrated Technology (AIT) (<https://catalog.kctcs.edu/course-descriptions/ait/>)
- Advanced Integrated Manufacturing (AIM) (<https://catalog.kctcs.edu/course-descriptions/aim/>)
- Agriculture (AGR) (<https://catalog.kctcs.edu/course-descriptions/agr/>)
- Air Conditioning and Refrigeration (ACR) (<https://catalog.kctcs.edu/course-descriptions/acr/>)
- Air Force Studies (AFS) (<https://catalog.kctcs.edu/course-descriptions/afs/>)
- Allied Health (AHS) (<https://catalog.kctcs.edu/course-descriptions/ahs/>)

- American Military Studies (AMS) (<https://catalog.kctcs.edu/course-descriptions/ams/>)
- American Sign Language (ASL) (<https://catalog.kctcs.edu/course-descriptions/asl/>)
- Anatomy and Neurobiology (ANA) (<https://catalog.kctcs.edu/course-descriptions/ana/>)
- Anthropology (ANT) (<https://catalog.kctcs.edu/course-descriptions/ant/>)
- Applied Engineering Technology (AET) (<https://catalog.kctcs.edu/course-descriptions/aet/>)
- Applied Process Technology (APT) (<https://catalog.kctcs.edu/course-descriptions/apt/>)
- Apprenticeship Studies (APS) (<https://catalog.kctcs.edu/course-descriptions/aps/>)
- Architectural Technology (ACH) (<https://catalog.kctcs.edu/course-descriptions/ach/>)
- Art (ART) (<https://catalog.kctcs.edu/course-descriptions/art/>)
- Art History (AH) (<https://catalog.kctcs.edu/course-descriptions/ah/>)
- Astronomy (AST) (<https://catalog.kctcs.edu/course-descriptions/ast/>)
- Auto Body/Collision Repair Tec (CRT) (<https://catalog.kctcs.edu/course-descriptions/crt/>)
- Automotive Technology (ADX) (<https://catalog.kctcs.edu/course-descriptions/adx/>)
- Automotive Technology (AUT) (<https://catalog.kctcs.edu/course-descriptions/aut/>)
- Aviation/Airway Management (ATE) (<https://catalog.kctcs.edu/course-descriptions/ate/>)

## B

- Basic Electricity (BEX) (<https://catalog.kctcs.edu/course-descriptions/bex/>)
- Biological Sciences (BIO) (<https://catalog.kctcs.edu/course-descriptions/bio/>)
- Biomedical Technology Systems (BTS) (<https://catalog.kctcs.edu/course-descriptions/bts/>)
- Biotechnology Laboratory Technician (BTN) (<https://catalog.kctcs.edu/course-descriptions/btn/>)
- Blueprint Reading (BRX) (<https://catalog.kctcs.edu/course-descriptions/brx/>)
- Broadband Technology (BBT) (<https://catalog.kctcs.edu/course-descriptions/bbt/>)
- Business Administration Systems (BAS) (<https://catalog.kctcs.edu/course-descriptions/bas/>)
- Business and Office Technology (BMO) (<https://catalog.kctcs.edu/course-descriptions/bmo/>)

## C

- Cardiopulmonary Resuscitation (CPR) (<https://catalog.kctcs.edu/course-descriptions/cpr/>)
- Chemistry (CHE) (<https://catalog.kctcs.edu/course-descriptions/che/>)
- Civil Engineering Technology (CET) (<https://catalog.kctcs.edu/course-descriptions/cet/>)
- Class Instruction in Music (MUC) (<https://catalog.kctcs.edu/course-descriptions/muc/>)

- Classical Languages and Literature (CLA) (<https://catalog.kctcs.edu/course-descriptions/cla/>)
- Communications (COM) (<https://catalog.kctcs.edu/course-descriptions/com/>)
- Community Dental Health (CDH) (<https://catalog.kctcs.edu/course-descriptions/cdh/>)
- Community Health Worker (CHW) (<https://catalog.kctcs.edu/course-descriptions/chw/>)
- Computer Information Systems (CIS) (<https://catalog.kctcs.edu/course-descriptions/cis/>)
- Computer Information Technology (CIT) (<https://catalog.kctcs.edu/course-descriptions/cit/>)
- Computer Science (CS) (<https://catalog.kctcs.edu/course-descriptions/cs/>)
- Computer-Aided Design (CAD) (<https://catalog.kctcs.edu/course-descriptions/cad/>)
- Computerized Manufacturing & Machining (CMM) (<https://catalog.kctcs.edu/course-descriptions/cmm/>)
- Construction/Carpentry (CAR) (<https://catalog.kctcs.edu/course-descriptions/car/>)
- Cooperative Education (COE) (<https://catalog.kctcs.edu/course-descriptions/coe/>)
- Cooperative Education (COED) (<https://catalog.kctcs.edu/course-descriptions/coed/>)
- Cosmetology (COS) (<https://catalog.kctcs.edu/course-descriptions/cos/>)
- Criminal Justice (CRJ) (<https://catalog.kctcs.edu/course-descriptions/crj/>)
- Criminal Justice (JUS) (<https://catalog.kctcs.edu/course-descriptions/jus/>)
- Culinary Arts (CUL) (<https://catalog.kctcs.edu/course-descriptions/cul/>)
- Cybersecurity (CYS) (<https://catalog.kctcs.edu/course-descriptions/cys/>)
- Education (EDM) (<https://catalog.kctcs.edu/course-descriptions/edm/>)
- Education (EDU) (<https://catalog.kctcs.edu/course-descriptions/edu/>)
- Educational and Counseling Psychology (EDP) (<https://catalog.kctcs.edu/course-descriptions/edp/>)
- Electrical Engineering (EE) (<https://catalog.kctcs.edu/course-descriptions/ee/>)
- Electrical Technology (EET) (<https://catalog.kctcs.edu/course-descriptions/eet/>)
- Electronics (EES) (<https://catalog.kctcs.edu/course-descriptions/ees/>)
- Energy Systems (ESP) (<https://catalog.kctcs.edu/course-descriptions/esp/>)
- Energy Technologies (EGY) (<https://catalog.kctcs.edu/course-descriptions/egy/>)
- Engineering & Electronics Technology (ELT) (<https://catalog.kctcs.edu/course-descriptions/elt/>)
- Engineering (EGR) (<https://catalog.kctcs.edu/course-descriptions/egr/>)
- Engineering Mechanics (EM) (<https://catalog.kctcs.edu/course-descriptions/em/>)
- Engineering Technology (ET) (<https://catalog.kctcs.edu/course-descriptions/et/>)
- English (ENG) (<https://catalog.kctcs.edu/course-descriptions/eng/>)
- English as a Second Language (ESL) (<https://catalog.kctcs.edu/course-descriptions/esl/>)
- English Composition (ENC) (<https://catalog.kctcs.edu/course-descriptions/enc/>)
- Environmental Science Technology (EST) (<https://catalog.kctcs.edu/course-descriptions/est/>)
- Environmental Technology (ENV) (<https://catalog.kctcs.edu/course-descriptions/env/>)
- Equine Management (EQM) (<https://catalog.kctcs.edu/course-descriptions/eqm/>)
- Equine Studies (EQS) (<https://catalog.kctcs.edu/course-descriptions/eqs/>)
- Experiential Education (EX) (<https://catalog.kctcs.edu/course-descriptions/ex/>)

## D

- Dental Assisting (DAS) (<https://catalog.kctcs.edu/course-descriptions/das/>)
- Dental Hygiene (DAH) (<https://catalog.kctcs.edu/course-descriptions/dah/>)
- Dental Hygiene (DHG) (<https://catalog.kctcs.edu/course-descriptions/dhg/>)
- Dental Hygiene (DHP) (<https://catalog.kctcs.edu/course-descriptions/dhp/>)
- Diagnostic Medical Sonographer (DMS) (<https://catalog.kctcs.edu/course-descriptions/dms/>)
- Diesel Technology (DIT) (<https://catalog.kctcs.edu/course-descriptions/dit/>)
- Digital Literacy (DLC) (<https://catalog.kctcs.edu/course-descriptions/dlc/>)

## E

- Economics (ECO) (<https://catalog.kctcs.edu/course-descriptions/eco/>)
- Economics (EFM) (<https://catalog.kctcs.edu/course-descriptions/efm/>)

## F

- Facilities Healthcare Technician (FHT) (<https://catalog.kctcs.edu/course-descriptions/fht/>)
- Family Studies (FAM) (<https://catalog.kctcs.edu/course-descriptions/fam/>)
- Fermentation Science (FRM) (<https://catalog.kctcs.edu/course-descriptions/frm/>)
- Filmmaking (FLM) (<https://catalog.kctcs.edu/course-descriptions/flm/>)
- Fire Science Technology (FIR) (<https://catalog.kctcs.edu/course-descriptions/fir/>)
- Fire/Rescue Training (FRT) (<https://catalog.kctcs.edu/course-descriptions/frt/>)
- First Year Experience (FYE) (<https://catalog.kctcs.edu/course-descriptions/fye/>)

- Fixed Wing Flight Training (FWT) (<https://catalog.kctcs.edu/course-descriptions/fwt/>)
- Fluid Power (FPX) (<https://catalog.kctcs.edu/course-descriptions/fpx/>)
- Folk Studies (FLK) (<https://catalog.kctcs.edu/course-descriptions/flk/>)
- Foreign Language Studies (FLS) (<https://catalog.kctcs.edu/course-descriptions/fls/>)
- French Language and Literature (FRE) (<https://catalog.kctcs.edu/course-descriptions/fre/>)

## G

- General College Studies (GEN) (<https://catalog.kctcs.edu/course-descriptions/gen/>)
- Geographic Information Systems (GIS) (<https://catalog.kctcs.edu/course-descriptions/gis/>)
- Geography (GEO) (<https://catalog.kctcs.edu/course-descriptions/geo/>)
- Geological Sciences (GLY) (<https://catalog.kctcs.edu/course-descriptions/gly/>)
- Germanic Languages and Literatures (GER) (<https://catalog.kctcs.edu/course-descriptions/ger/>)
- Graphic Design and Library Technology (IMD) (<https://catalog.kctcs.edu/course-descriptions/imd/>)

## H

- Health Care Foundations (HST) (<https://catalog.kctcs.edu/course-descriptions/hst/>)
- Health Care Specialist (HCS) (<https://catalog.kctcs.edu/course-descriptions/hcs/>)
- Health Facilities Orientation (HFO) (<https://catalog.kctcs.edu/course-descriptions/hfo/>)
- Health Information Technology (HIT) (<https://catalog.kctcs.edu/course-descriptions/hit/>)
- Health Mathematics Fundamentals (FHM) (<https://catalog.kctcs.edu/course-descriptions/fhm/>)
- Health Sciences Education (HSE) (<https://catalog.kctcs.edu/course-descriptions/hse/>)
- Healthcare Facility Management (HFL) (<https://catalog.kctcs.edu/course-descriptions/hfl/>)
- Heavy Equipment Operation (HEO) (<https://catalog.kctcs.edu/course-descriptions/heo/>)
- Helicopter Flight Training (HFT) (<https://catalog.kctcs.edu/course-descriptions/hft/>)
- Historic Preservation Technology (HPT) (<https://catalog.kctcs.edu/course-descriptions/hpt/>)
- History (HIS) (<https://catalog.kctcs.edu/course-descriptions/his/>)
- Homeland Security-Emergency Management (HSM) (<https://catalog.kctcs.edu/course-descriptions/hsm/>)
- Honors (HNR) (<https://catalog.kctcs.edu/course-descriptions/hnr/>)
- Honors (HON) (<https://catalog.kctcs.edu/course-descriptions/hon/>)
- Honors (HRS) (<https://catalog.kctcs.edu/course-descriptions/hrs/>)
- Horticulture (HRT) (<https://catalog.kctcs.edu/course-descriptions/hrt/>)
- Hospitality Management (HOS) (<https://catalog.kctcs.edu/course-descriptions/hos/>)

- Human Services (HMS) (<https://catalog.kctcs.edu/course-descriptions/hms/>)
- Humanities (HUM) (<https://catalog.kctcs.edu/course-descriptions/hum/>)

## I

- Industrial Core (IEX) (<https://catalog.kctcs.edu/course-descriptions/iex/>)
- Industrial Maintenance Technology (IMT) (<https://catalog.kctcs.edu/course-descriptions/imt/>)
- Industrial Safety (ISX) (<https://catalog.kctcs.edu/course-descriptions/isx/>)
- Informatics (IFM) (<https://catalog.kctcs.edu/course-descriptions/ifm/>)
- Informatics (INF) (<https://catalog.kctcs.edu/course-descriptions/inf2/>)
- Instrumentation and Process (ISM) (<https://catalog.kctcs.edu/course-descriptions/ism/>)
- Insurance (INS) (<https://catalog.kctcs.edu/course-descriptions/ins/>)
- Integrated Engineering Technology (IET) (<https://catalog.kctcs.edu/course-descriptions/iet/>)
- Integrated Reading and Writing (IRW) (<https://catalog.kctcs.edu/course-descriptions/irw/>)
- Interdisciplinary Early Childhood (IEC) (<https://catalog.kctcs.edu/course-descriptions/iec/>)
- Interior Finishing (INF) (<https://catalog.kctcs.edu/course-descriptions/inf/>)

## J

- Japanese (JPN) (<https://catalog.kctcs.edu/course-descriptions/jpn/>)
- Journalism (JOU) (<https://catalog.kctcs.edu/course-descriptions/jou/>)
- Journalism - Advertising - Telecommunications (JAT) (<https://catalog.kctcs.edu/course-descriptions/jat/>)

## K

- Kentucky Medication Aide (KMA) (<https://catalog.kctcs.edu/course-descriptions/kma/>)
- Kinesiology and Health Promotion (KHP) (<https://catalog.kctcs.edu/course-descriptions/khp/>)

## L

- Library Information Technology (LIT) (<https://catalog.kctcs.edu/course-descriptions/lit/>)
- Linguistics (LIN) (<https://catalog.kctcs.edu/course-descriptions/lin/>)
- Logistics and Operations Management (LOM) (<https://catalog.kctcs.edu/course-descriptions/lom/>)

## M

- Management (MGT) (<https://catalog.kctcs.edu/course-descriptions/mgt/>)
- Manufacturing (MFG) (<https://catalog.kctcs.edu/course-descriptions/mfg/>)
- Manufacturing Systems Technology (MST) (<https://catalog.kctcs.edu/course-descriptions/mst/>)

- Marine Technology (MRN) (<https://catalog.kctcs.edu/course-descriptions/mrn/>)
- Marketing (MKT) (<https://catalog.kctcs.edu/course-descriptions/mkt/>)
- Masonry (MSY) (<https://catalog.kctcs.edu/course-descriptions/msy/>)
- Massage Therapy (MSG) (<https://catalog.kctcs.edu/course-descriptions/msg/>)
- Mathematics (MA) (<https://catalog.kctcs.edu/course-descriptions/ma/>)
- Mathematics (MAT) (<https://catalog.kctcs.edu/course-descriptions/mat/>)
- Mechanical Engineering (ME) (<https://catalog.kctcs.edu/course-descriptions/me/>)
- Mechatronic Systems (MES) (<https://catalog.kctcs.edu/course-descriptions/mes/>)
- Medicaid Nurse Aide (MNA) (<https://catalog.kctcs.edu/course-descriptions/mna/>)
- Medical Assisting (MAI) (<https://catalog.kctcs.edu/course-descriptions/mai/>)
- Medical Billing Specialist (MBS) (<https://catalog.kctcs.edu/course-descriptions/mbs/>)
- Medical Information Technology (MIT) (<https://catalog.kctcs.edu/course-descriptions/mit/>)
- Medical Laboratory Technology (MLT) (<https://catalog.kctcs.edu/course-descriptions/mlt/>)
- Medical Office Radiology (MOR) (<https://catalog.kctcs.edu/course-descriptions/mor/>)
- Metroversity (MVC) (<https://catalog.kctcs.edu/course-descriptions/mvc/>)
- Mining Technology (MNG) (<https://catalog.kctcs.edu/course-descriptions/mng/>)
- Music (MU) (<https://catalog.kctcs.edu/course-descriptions/mu/>)
- Music (MUS) (<https://catalog.kctcs.edu/course-descriptions/mus/>)
- Music Performance (MUP) (<https://catalog.kctcs.edu/course-descriptions/mup/>)

## N

- Nursing (NRS) (<https://catalog.kctcs.edu/course-descriptions/nrs/>)
- Nursing (NSG) (<https://catalog.kctcs.edu/course-descriptions/nsg/>)
- Nursing Assistant (NAA) (<https://catalog.kctcs.edu/course-descriptions/naa/>)
- Nursing Integrated Program (NIP) (<https://catalog.kctcs.edu/course-descriptions/nip/>)
- Nutrition and Food Science (NFS) (<https://catalog.kctcs.edu/course-descriptions/nfs/>)

## O

- Occupational Therapy Assistant (OTA) (<https://catalog.kctcs.edu/course-descriptions/ota/>)
- Office Systems Technology (OST) (<https://catalog.kctcs.edu/course-descriptions/ost/>)
- Orthotics and Prosthetics Technology (ORP) (<https://catalog.kctcs.edu/course-descriptions/orp/>)

## P

- Paralegal Technology (PGL) (<https://catalog.kctcs.edu/course-descriptions/pgl/>)
- Paramedic/Allied Health (EMS) (<https://catalog.kctcs.edu/course-descriptions/ems/>)
- Pharmacy (PHA) (<https://catalog.kctcs.edu/course-descriptions/pha/>)
- Philosophy (PHI) (<https://catalog.kctcs.edu/course-descriptions/phi/>)
- Phlebotomy (PHB) (<https://catalog.kctcs.edu/course-descriptions/phb/>)
- Physical Therapist Assistant (PTA) (<https://catalog.kctcs.edu/course-descriptions/pta/>)
- Physics (PHX) (<https://catalog.kctcs.edu/course-descriptions/phx/>)
- Physics (PHY) (<https://catalog.kctcs.edu/course-descriptions/phy/>)
- Physiology (PGY) (<https://catalog.kctcs.edu/course-descriptions/pgy/>)
- Plumbing (PLB) (<https://catalog.kctcs.edu/course-descriptions/plb/>)
- Political Science (POL) (<https://catalog.kctcs.edu/course-descriptions/pol/>)
- Polysomnography (PSG) (<https://catalog.kctcs.edu/course-descriptions/psg/>)
- Power Mechanics/Measurement (PMX) (<https://catalog.kctcs.edu/course-descriptions/pmx/>)
- Practical Nursing (NPN) (<https://catalog.kctcs.edu/course-descriptions/npn/>)
- Profession Studio Artist Music (PSM) (<https://catalog.kctcs.edu/course-descriptions/psm/>)
- Project Lead The Way (PLW) (<https://catalog.kctcs.edu/course-descriptions/plw/>)
- Psychology (PSY) (<https://catalog.kctcs.edu/course-descriptions/psy/>)

## Q

- Quality Management Systems (QMS) (<https://catalog.kctcs.edu/course-descriptions/qms/>)

## R

- Radiography (IMG) (<https://catalog.kctcs.edu/course-descriptions/img/>)
- Radiologic Technology (DMI) (<https://catalog.kctcs.edu/course-descriptions/dmi/>)
- Reading (RDG) (<https://catalog.kctcs.edu/course-descriptions/rdg/>)
- Real Estate (REA) (<https://catalog.kctcs.edu/course-descriptions/rea/>)
- Religious Studies (REL) (<https://catalog.kctcs.edu/course-descriptions/rel/>)
- Respiratory Care Practitioner (RCP) (<https://catalog.kctcs.edu/course-descriptions/rcp/>)
- Russian and Eastern Studies (RAE) (<https://catalog.kctcs.edu/course-descriptions/rae/>)

## S

- Safety and First Aid (SFA) (<https://catalog.kctcs.edu/course-descriptions/sfa/>)

- Science (SCI) (<https://catalog.kctcs.edu/course-descriptions/sci/>)
- Social Work (SWK) (<https://catalog.kctcs.edu/course-descriptions/swk/>)
- Sociology (SOC) (<https://catalog.kctcs.edu/course-descriptions/soc/>)
- Spanish Language and Literature (SPA) (<https://catalog.kctcs.edu/course-descriptions/spa/>)
- Special Education (SED) (<https://catalog.kctcs.edu/course-descriptions/sed/>)
- Statistics (STA) (<https://catalog.kctcs.edu/course-descriptions/sta/>)
- Student Development (SDC) (<https://catalog.kctcs.edu/course-descriptions/sdc/>)
- Surgical Technology (SUR) (<https://catalog.kctcs.edu/course-descriptions/sur/>)
- Surveying (SMT) (<https://catalog.kctcs.edu/course-descriptions/smt/>)
- Sustainability (SUS) (<https://catalog.kctcs.edu/course-descriptions/sus/>)

## T

- Teaching English to Speakers of Other Languages (TES) (<https://catalog.kctcs.edu/course-descriptions/tes/>)
- Technical Communication (TEC) (<https://catalog.kctcs.edu/course-descriptions/tec/>)
- Telehealth Technician Assistant (TLH) (<https://catalog.kctcs.edu/course-descriptions/tlh/>)
- Theatre (TA) (<https://catalog.kctcs.edu/course-descriptions/ta/>)
- Theatre (THA) (<https://catalog.kctcs.edu/course-descriptions/tha/>)
- Truck Driving (TNT) (<https://catalog.kctcs.edu/course-descriptions/tnt/>)
- Truck Driving (TRU) (<https://catalog.kctcs.edu/course-descriptions/tru/>)

## U

- Unmanned Systems Technology (UST) (<https://catalog.kctcs.edu/course-descriptions/ust/>)
- UTC Physics (PHS) (<https://catalog.kctcs.edu/course-descriptions/phs/>)
- Utility Construction Systems (UCS) (<https://catalog.kctcs.edu/course-descriptions/ucs/>)

## V

- Veterinary Technology (VET) (<https://catalog.kctcs.edu/course-descriptions/vet/>)
- Visual Communications Art and Design (VCA) (<https://catalog.kctcs.edu/course-descriptions/vca/>)
- Visual Communications Core (VCC) (<https://catalog.kctcs.edu/course-descriptions/vcc/>)
- Visual Communications Multimedia (VCM) (<https://catalog.kctcs.edu/course-descriptions/vcm/>)
- Visual Communications Printing (VCP) (<https://catalog.kctcs.edu/course-descriptions/vcp/>)

## W

- Welding (WLD) (<https://catalog.kctcs.edu/course-descriptions/wld/>)
- Womens Studies (WGS) (<https://catalog.kctcs.edu/course-descriptions/wgs/>)
- Workplace Principles (WPP) (<https://catalog.kctcs.edu/course-descriptions/wpp/>)