Central Texas College District Associate of Science in Mathematics (AAS-MAT4) (AS-MATH)

Fort Hood, TX

Degree Objective- Prepares graduates for transfer to university programs of study by introducing a broad base of concepts in the humanities, social/behavioral sciences, mathematics, and natural and physical sciences. Graduates receiving the associate of science degree will be prepared for further study at the university level in the sciences, engineering, and other professional and related fields. The degree plan comprises 60 semester credit hours of which 41 are in general education courses and 19 are in mathematics. This degree is appropriate for transfer into a bachelor-level degree program.

POINT OF CONTACT

Debbie Hansen, Director of Evaluations & Graduation P.O. Box 1800, Killeen, TX 76540 (254) 526-1394 or (800) 792-3348, ext. 1394 Fax (254) 526-1481 debbie.hansen@ctcd.edu www.ctcd.edu

Academic Residency- 15 semester hours

| DEGREE REQUIREMENTS | | | HOME COLLEGE | ARMY SCHOOL | ARMY MOS | TESTS | CERT / LIC | DIST LRNG See Note 2 |
|------------------------|--|----------|-----------------|----------------|-------------|-------|---------------|--|
| General Education | | 41-43 SH | | | | | | |
| English | | 3 SH | | | | | | |
| ENGL 1301 | Composition I | 3 | Х | | | Х | | Х |
| Speech | | 3 SH | | | | | | |
| SPCH 1315 | Public Speaking | 3 | Х | | | Х | | Х |
| SPCH 1318 | Interpersonal Communication | 3 | Х | | | | | |
| SPCH 1321 | Business and Professional Communication | 3 | Х | | | | | Х |
| Mathematics | | 3-4 SH | | | | | | |
| MATH 1414 | College Algebra OR | 3 | Х | | | Х | | Х |
| MATH 1342 | Elementary Statistical Methods | 3 | | | | | | |
| Life and Physical S | cience | 8 SH | | | | | | |
| AGRI 1407 | Agronomy | 4 | Х | | | | | |
| AGRI 1415 | Horticulture | 4 | Х | | | | | |
| AGRI 1419 | Introductory Animal Science (Animal Husbandry) | 4 | Х | | | | | |
| BIOL 1406 | Biology for Science Majors I AND | 4 | Х | | | Х | | |
| BIOX 1406 | Biology for Science Majors I Lab | 0 | Х | | | | | |
| BIOL 1407 | Biology for Science Majors II AND | 4 | X | | | Х | | |
| BIOX 1407 | Biology for Science Majors II Lab | 0 | X | | | | | t — |
| BIOL 1408 | Biology for Non-Science Majors I AND | 4 | <u> </u> | | | | | |
| BIOX 1408 | Biology for Non-Science Majors I Lab | 0 | | | | | | |
| BIOL 1409 | Biology for Non-Science Majors II AND | 4 | Х | | 1 | 1 | 1 | |
| BIOX 1409 | | 0 | X | | | | | |
| | Biology for Non-Science Majors II Lab General Botany AND | 4 | X | | | | | |
| BIOL 1411 BIOX 1411 | · | 0 | X | | | | | |
| | General Botany - Lab | | | | | | | |
| BIOL 1413 | General Zoology AND | 4 | X | | | | | |
| BIOX 1413 | General Zoology - Lab | 0 | X | | | | | |
| BIOL 2401 | Anatomy and Physiology I AND | 4 | X | | | | | |
| BIOX 2401 | Anatomy and Physiology I Lab | 0 | X | | | | | |
| BIOL 2402 | Anatomy and Physiology II AND | 4 | Х | | | | | |
| BIOX 2402 | Anatomy and Physiology II Lab | 0 | Х | | | | | |
| BIOL 2420 | Microbiology for Non-Science Majors AND | 4 | Х | | | | | |
| BIOX 2420 | Microbiology for Non-Science Majors Lab | 0 | Х | | | | | |
| BIOL 2421 | Microbiology for Science Majors AND | 4 | Х | | | | | |
| BIOX 2421 | Microbiology for Science Majors Lab | 0 | Х | | | | | |
| CHEM 1406 | Introductory Chemistry I AND | 4 | X | | | | | |
| CHEX 1406 | Introductory Chemistry I-Lab | 0 | X | | | | | |
| CHEM 1407 | Introductory Chemistry II AND | 4 | X | | | | | |
| CHEX 1407 | Introductory Chemistry II-Lab | 0 | X | | | | | |
| CHEM 1411 | General Chemistry I AND | 4 | X | | | X | | |
| CHEX 1411 | General Chemistry I-Lab | 0 | Х | | | | | |
| CHEM 1412 | General Chemistry II AND | 4 | Х | | | Х | | |
| CHEX 1412 | General Chemistry II-Lab | 0 | Х | | | | | |
| ENVR 1401 | Environmental Science AND | 4 | Х | | | | | |
| ENVX 1401 | Environmental Science Lab | | | | | | | |
| GEOL 1403 | Physical Geology AND | 4 | Х | | | Х | | |
| GEOX 1403 | Physical Geology Lab | 0 | Х | | | | | |
| GEOL 1404 | Historical Geology AND | 4 | Х | | | | | |
| GEOX 1404 | Historical Geology Lab | 0 | Х | | | | | |
| PHYS 1401 | College Physics I AND | 4 | X | | | | | |
| PHYX 1401 | College Physics I Lab | 0 | X | | | | | t — |
| PHYS 1402 | College Physics II AND | 4 | X | | | | | t — |
| PHYX 1402 | College Physics II Lab | 0 | X | | | | | |
| PHYS 1403 | Stars and Galaxies AND | 4 | X | | 1 | 1 | 1 | Х |
| PHYX 1403 | Stars and Galaxies - Lab | 0 | X | | 1 | 1 | 1 | X |
| PHYS 1404 | Solar System AND | 4 | X | | | | | X |
| PHYX 1404 | Solar System - Lab | 0 | X | | | | | X |
| PHYS 1404 PHYS 1415 | Physical Science I AND | 4 | X | | - | Х | - | |
| | | | | | - | ^ | - | |
| PHYX 1415 | Physical Science I Lab | 0 | X | | | | | |
| PHYS 2425 | University Physics I AND | 4 | X | | | | | |
| PHYX 2425 | University Physics I Lab | 0 | X | | | | | |
| PHYS 2426 | University Physics II AND | 4 | X | | | | | |
| PHYX 2426 | University Physics II Lab | 0 | Х | | | | | |
| Creative Arts | | 3 SH | | | | | | |
| ARTS 1303 | Art History I | 3 | Х | | | Х | | Х |
| ARTS 1304 | Art History II | 3 | X | | | | | X |

| DEGREE REQUIREMENTS | | | HOME COLLEGE | ARMY SCHOOL | ARMY MOS | TESTS | CERT / LIC | DIST LRNG See Note 2 |
|------------------------|--|--------|-----------------|--|-------------|-------|---------------|--|
| DRAM 1310 | Introduction to Theater | 3 | X | | | | | |
| DRAM 2366 | Introduction to Cinema | 3 | X | | | | | + |
| HUMA 1315 | Fine Arts Appreciation | 3 | Х | | | | | |
| MUSI 1306 | Music Appreciation | 3 | Х | | | | | |
| Language, Philoso | | 3 SH | | | | | | |
| ANTH 2351 | Cultural Anthropology | 3 | Х | | | | | Х |
| DRAM 2361 | History of Theatre I | 3 | X | | | | | \longmapsto |
| DRAM 2362 ENGL 2322 | History of Theatre II British Literature I | 3 | X | | | Х | | Х |
| ENGL 2322 | British Literature II | 3 | X | | | X | | X |
| ENGL 2327 | American Literature I | 3 | X | | | X | | X |
| ENGL 2328 | American Literature II | 3 | X | | | X | | X |
| ENGL 2332 | World Literature I | 3 | Х | | | | | Х |
| FREN 1411 | Beginning French I | 4 | Х | | | Х | | |
| FREN 1412 | Beginning French II | 4 | Х | | | Х | | |
| GERM 1411 | Beginning German I | 4 | X | | | Х | | |
| GERM 1412 | Beginning German II | 4 | X | | | Х | | |
| MUSI 1307 | Music Literature | 3 | Х | | | | | |
| PHIL 1301 | Introduction to Philosophy | 3 | X | | | | | X |
| PHIL 1304 | Introduction to World Religions | 3 | X | | | X | | X |
| PHIL 2306 PHIL 2307 | Introduction to Ethics Introduction to Social and Political Philosophy | 3 | X | | | Х | | X |
| PHIL 2307 PHIL 2321 | Philosophy of Religion | 3 | X | - | | | | X |
| RUSS 1411 | Beginning Russian I | 4 | X | Х | | | | X |
| RUSS 1412 | Beginning Russian II | 4 | X | X | | | | X |
| SPAN 1411 | Beginning Spanish I | 4 | Х | | | Х | | † |
| SPAN 1412 | Beginning Spanish II | 4 | Х | | | Х | | |
| Social/Behavioral S | cience | 15 SH | | | | | | |
| GOVT 2305 | Federal Government | 3 | Х | | | Х | | X |
| GOVT 2306 | Texas Government | 3 | Х | | | Х | | X |
| HIST 1301 | United States History I | 3 | Х | | | Х | | Х |
| HIST 1302 | United States History II | 3 | Х | | | Х | | Х |
| And one of the follo | | _ | V | | | | | |
| AGRI 2317 ECON 2301 | Introduction to Agriculture Economics | 3 | X | | | Х | | X |
| ECON 2301 ECON 2302 | Principles of Macroeconomics Principles of Microeconomics | 3 | X | | | X | | X |
| GEOG 1301 | Physical Geography | 3 | X | | | ^ | | X |
| GEOG 1302 | Cultural Geography | 3 | X | | | Х | | X |
| GEOG 1303 | World Regional Geography | 3 | X | | | | | X |
| GOVT 2304 | Introduction to Political Science | 3 | Х | | | | | |
| HIST 2301 | Texas History | 3 | Х | | | | | Х |
| HIST 2311 | Western Civilization I | 3 | Х | | | Х | | X |
| HIST 2312 | Western Civilization II | 3 | Х | | | Х | | X |
| HIST 2321 | World Civilizations I | 3 | Х | | | | | |
| HIST 2322 | World Civilizations II | 3 | X | | | | | |
| HIST 2381 | African-American History | 3 | X | | | | | X |
| PSYC 2301 | General Psychology | 3 | X | | | X | | X |
| PSYC 2308 PSYC 2314 | Child Psychology Life Span Growth and Development | 3 | X | | | X | | X |
| PSYC 2315 | Psychology of Adjustment | 3 | X | | | ^ | | X |
| PSYC 2316 | Psychology of Personality | 3 | X | | | | | X |
| SOCI 1301 | Introduction to Sociology | 3 | X | | | Х | | X |
| SOCI 1306 | Social Problems | 3 | Х | | | | | Х |
| SOCI 2301 | Marriage and the Family | 3 | Х | | | | | Х |
| SOCI 2319 | Minority Studies | 3 | Х | | | | | Х |
| Component Area O | | 3-4 SH | | | | | | |
| AGRI 1407 | Agronomy | 4 | ., | | | | | |
| AGRI 1415 | Horticulture | 4 | X | - | | | | \vdash |
| AGRI 1419 | Introductory Animal Science (Animal Husbandry) | 4 | X | | | | | ├ |
| AGRI 2317 ANTH 2351 | Introduction to Agriculture Economics Cultural Anthropology | 3 | X | 1 | | | | \vdash |
| ARTS 1303 | Art History I | 3 | X | | | Х | | Х |
| ARTS 1303 | Art History II | 3 | X | | | | | X |
| BCIS 1305 | Business Computer Applications | 3 | X | | | | | X |
| BIOL 1406 | Biology for Science Majors I AND | 4 | X | | | Х | | |
| BIOX 1406 | Biology for Science Majors I Lab | 0 | Х | İ | | | | |
| BIOL 1407 | Biology for Science Majors II AND | 4 | Х | | | Х | | |
| BIOX 1407 | Biology for Science Majors II Lab | 0 | Х | | | | | |
| BIOL 1408 | Biology for Non-Science Majors I AND | 4 | Х | | | | | |
| BIOX 1408 | Biology for Non-Science Majors I Lab | 0 | Х | | | | | igsquare |
| BIOL 1409 | Biology for Non-Science Majors II AND | 4 | X | ļ | | | | |
| BIOX 1409 | Biology for Non-Science Majors II Lab | 0 | X | | | | | |
| BIOL 1411 | General Botany AND | 4 | X | - | | | | \vdash |
| BIOX 1411 BIOL 1413 | General Botany - Lab | 0 4 | X | - | | | | ├── ┤ |
| BIOX 1413 | General Zoology AND General Zoology - Lab | 0 | X | | | | | |
| BIOL 2401 | Anatomy and Physiology I AND | 4 | X | | | | | ++ |
| DIOL 2401 | r maiority and i hydrology i AND | | _ ^ | 1 | | | | |

| DEGREE REQUIREMENTS | | HOME COLLEGE | ARMY SCHOOL | ARMY MOS | TESTS | CERT / LIC | DIST LRNG See Note 2 | |
|------------------------|---|-----------------|----------------|-------------|-------|---------------|-------------------------|--|
| BIOX 2401 | Anatomy and Physiology I Lab | 0 | Х | | | | | |
| BIOL 2402 | Anatomy and Physiology II AND | 4 | Х | | | | | |
| BIOX 2402 | Anatomy and Physiology II Lab | 0 | Х | | | | | |
| BIOL 2420 | Microbiology for Non-Science Majors AND | 4 | X | | | | | |
| BIOX 2420 | Microbiology for Non-Science Majors Lab | 0 | X | | | | | |
| BIOL 2421 | Microbiology for Science Majors AND | 4 0 | X | | | | | |
| BIOX 2421 BUSI 1301 | Microbiology for Science Majors Lab | 3 | X | | | | | |
| CHEM 1406 | Business Principles Introductory Chemistry I AND | 4 | X | | | | | |
| CHEX 1406 | Introductory Chemistry I-Lab | 0 | X | | | | | |
| CHEM 1407 | Introductory Chemistry II AND | 4 | X | | | | | 1 |
| CHEX 1407 | Introductory Chemistry II-Lab | 0 | X | | | | | |
| CHEM 1411 | General Chemistry I AND | 4 | Х | | | Х | | |
| CHEX 1411 | General Chemistry I-Lab | 0 | Х | | | | | |
| CHEM 1412 | General Chemistry II AND | 4 | Х | | | Х | | İ |
| CHEX 1412 | General Chemistry II-Lab | 0 | Х | | | | | |
| COSC 1301 | Introduction to Computing | 3 | Х | Χ | Χ | Х | | X |
| DRAM 1310 | Introduction to Theater | 3 | Х | | | | | |
| DRAM 2361 | History of Theatre I | 3 | Х | | | | | |
| DRAM 2362 | History of Theatre II | 3 | Х | | | | | |
| DRAM 2366 | Introduction to Cinema | 3 | Х | | | | | |
| ECON 2301 | Principles of Macroeconomics | 3 | X | | | X | | |
| ECON 2302 | Principles of Microeconomics | 3 | X | | | Х | | |
| EDUC 1101 | Learning Frameworks | 1 | X | | | | | |
| ENGL 1302 ENGL 2322 | Composition II British Literature I | 3 | X | | | | | |
| ENGL 2322 | British Literature II | 3 | X | | | X | | Х |
| ENGL 2323 | American Literature I | 3 | X | | | ^ | | ^ |
| ENGL 2328 | American Literature II | 3 | X | | | | | |
| ENGL 2332 | World Literature I | 3 | X | | | | | |
| ENVR 1401 | Environmental Science I AND | 4 | X | | | Х | | i i |
| ENVX 1401 | Environmental Science I-Lab | 0 | X | | | | Х | i i |
| FREN 1411 | Beginning French I | 4 | Х | Х | | Х | Х | Х |
| FREN 1412 | Beginning French II | 4 | Х | Х | | Х | Х | Х |
| GEOG 1301 | Physical Geography | 3 | Х | | | | | X |
| GEOG 1302 | Cultural Geography | 3 | Х | | | Х | | X |
| GEOG 1303 | World Regional Geography | 3 | Х | | | Х | | Х |
| GEOL 1403 | Physical Geology AND | 4 | X | | | Х | | |
| GEOX 1403 | Physical Geology Lab | 0 | Х | | | | | |
| GEOL 1404 | Historical Geology AND | 4 | Х | | | | | |
| GEOX 1404 | Historical Geology Lab | 0 | Х | | | | | |
| GERM 1411 | Beginning German I | 4 | X | X | | X | X | X |
| GERM 1412 | Beginning German II | 4 | X | X | | Х | Х | Х |
| GOVT 2304 | Introduction to Political Science | 3 | X | | | | | |
| HIST 2301 HIST 2311 | Texas History Western Civilization I | 3 | X | | | X | | X |
| HIST 2312 | Western Civilization I | 3 | X | | | X | | X |
| HIST 2381 | African-American History | 3 | X | | | ^ | | X |
| HUMA 1315 | Fine Arts Appreciation | 3 | X | | | Х | | X |
| MATH 1314 | College Algebra | 3 | X | | | | | |
| MATH 1332 | Contemporary Mathematics (Quantitative Reasoning) | 3 | Х | | | Х | | Х |
| MATH 1342 | Elementary Statistical Methods | 3 | Х | | | Х | | Х |
| MUSI 1306 | Music Appreciation | 3 | Х | | | | | X |
| MUSI 1307 | Music Literature | 3 | Х | | | | | Х |
| PHIL 1301 | Introduction to Philosophy | 3 | Х | | | | | Х |
| PHIL 1304 | Introduction to World Religions | 3 | Х | | | Х | | Х |
| PHIL 2306 | Introduction to Ethics | 3 | Х | | | Х | | Х |
| PHIL 2307 | Introduction to Social and Political Philosophy | 3 | X | | | | | X |
| PHIL 2321 | Philosophy of Religion | 3 | X | | | | | Х |
| PHYS 1401 | College Physics I AND | 4 | X | | | | | |
| PHYX 1401 | College Physics I Lab | 0 | X | | | | | |
| PHYS 1402 | College Physics II AND | 4 | X | | | | | |
| PHYX 1402 PHYS 1403 | College Physics II Lab Stars and Galaxies AND | 0 4 | X | | | Х | | Х |
| PHYS 1403 PHYX 1403 | Stars and Galaxies AND Stars and Galaxies - Lab | 0 | X | | | ^ | | X |
| PHYS 1403 | Solar System AND | 4 | X | | | | | X |
| PHYX 1404 | Solar System - Lab | 0 | X | | | | | X |
| PHYS 1415 | Physical Science I AND | 4 | X | | | Х | | |
| PHYX 1415 | Physical Science I Lab | 0 | X | | | ., | | |
| PSYC 2301 | General Psychology | 3 | X | | | Х | | Х |
| PSYC 2308 | Child Psychology | 3 | X | | | X | | X |
| PSYC 2314 | Life Span Growth and Development | 3 | Х | | | Х | | Х |
| PSYC 2315 | Psychology of Adjustment | 3 | Х | | | | | Х |
| PSYC 2316 | Psychology of Personality | 3 | Х | | | | | Х |
| RUSS 1411 | Beginning Russian I | 4 | Х | Х | | Х | | Х |
| RUSS 1412 | Beginning Russian II | 4 | Х | X | | Х | | Х |
| SOCI 1301 | Introduction to Sociology | 3 | Х | | | X | | X |
| · | | | | | | · | | · · · · · · · · · · · · · · · · · · · |

| DEGREE REQUIREMENTS | | HOME COLLEGE | ARMY SCHOOL | ARMY MOS | TESTS | CERT / LIC | DIST LRNG See Note 2 | | |
|----------------------|---------------|---|----------------|-------------|-------|---------------|-------------------------|---|---|
| SOCI | 1306 | Social Problems | 3 | Х | | | | | Х |
| SOCI | 2301 | Marriage and the Family | 3 | Х | | | | | Х |
| SOCI | 2319 | Minority Studies | 3 | Х | | | | | Х |
| SPAN | 1411 | Beginning Spanish I | 4 | X | X | | Х | Х | Х |
| SPAN | 1412 | Beginning Spanish II | 4 | X | X | | X | Χ | Х |
| SPCH | 1315 | Public Speaking | 3 | X | X | Х | X | | Х |
| SPCH | 1318 | Interpersonal Communication | 3 | Х | X | Х | | | |
| SPCH | 1321 | Business and Professional Communication | 3 | X | X | Х | | | Х |
| Major Requirements** | | 19 SH | | | | | | | |
| MATH | 2412 | Precalculus Math | 4 | Х | | | | | X |
| MATH | 2413 | Calculus I | 4 | Х | | | Х | | Х |
| MATH | 2414 | Calculus II | 4 | X | | | Х | | Х |
| MATH | 2415 | Calculus III | 4 | Х | | | | | X |
| MATH | 2320 | Differential Equations OR | 3 | Х | | | Χ | | X |
| MATH | 2318 | Linear Algebra | 3 | X | · | | | | X |
| Total Credi | Total Credits | | 60 SH | | | | | | |

Notes:

- 1) An "X" in a column indicates that the Institution guarantees to accept credit from the source shown for at least part of the requirement.
- 2) This column indicates whether a school accepts transfer credit for courses taken through distance learning. It does not mean that the school offers the course through distance learning.
- 3) A course may be used toward one requirement only.
- 4) Only lower-level courses are accepted in transfer.
- 5) The student is responsible for meeting course prerequisites. It is recommended that the student take placement tests prior to enrolling in mathematics, reading-intensive, and writing courses. Based on scores, the student may be required to take a series of developmental study courses.
- 6) Soldiers electing to take the high end semester hour range of a degree requirement area will need to request an ESO override if the total degree credits exceed 60 SH.

*Texas four-year colleges and universities require a physical activity course in the core general education area in the AA degree program. If the student transfers to a Texas college or university to complete a bachelor-level degree program, the student who was awarded physical education credits based on a military service school may be required to take a physical activity course.

**The student is required to complete a minimum of 7 SH, which may be taken by selecting two to three courses from the list (7-10 SH) or by taking comparable lower-level, non-duplicating mathematics courses at another college alone or in combination with CTC courses.

| Date Effective: | 1-Oct-19 |
|-----------------|----------|
| Term Effective: | T760 |