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|  | Degree Requirements Checklist  **Bachelor of Science with a major in Mathematics**  **2012-2013 Catalog**  *This program is designed to fulfill the course requirements for certification as a secondary school teacher in Texas, but completion of the program does not guarantee the student’s certification. This checklist has been created as a guideline and is not considered to be an official document. For further information about meeting degree and additional certification requirements, contact the TNT advisor.* | |
| I. UNIVERSITY CORE AND COLLEGE REQUIREMENTS | | Hours |
| English Composition & Rhetoric: □ ENGL1310 (1301) or TECM 1710 + □ TECM 2700 or ENGL 1320 (1302)  US History: □ HIST 2610 (1301)\* + □ HIST 2620 (1302)\*  Political Science: □ PSCI 1040 (GOVT 2301) + □ PSCI 1050 or 1060 (GOVT 2302)  Humanities: □ PHIL 2600\* - Ethics in Science (Specific TNT section)  Social and Behavioral Sciences: Any course listed under “meets the core standard” in course catalog  Visual/Performing Arts: Any course listed under “meets the core standard” in course catalog  Foreign Language: □ LANG 1010 (1311/1411)  *+* □ LANG 1020 (1312/1412) *(Spanish is recommended)*  *Requirement may also be satisfied by taking an advanced technical writing sequence. See TNT advisor for details.*  Discovery: □ MATH 2100\*\* – Functions & Modeling (See Major Requirements)  Capstone: □ EDSE 4618\* – Student Teaching II in Math & Science (See Minor Requirements)  *\*Courses are part of the TNT minor sequence and count towards both requirements.*  *\*\*Course is part of the Mathematics with Secondary Teaching Certification major and counts toward both requirements.* | | 6  6  6  (3)\*  3  3  6  (3)\*  (3)\* |
| II. MAJOR REQUIREMENTS: A GPA of at least 2.0 is required for all mathematics courses above 3350. | | 16  12  3  3  9  4  12 |
| Mathematics Core: □ MATH 1710(2413/2513) □ MATH 1720(2414) □ MATH 3000 □ MATH 2700(2318/2418)  □ MATH 2730 (2315/2415)  Secondary Teacher Preparation: □ MATH 2100\*\*(See Core Requirements) □ MATH 3680 □ MATH 4050 □ MATH 4060  Analysis\*: One of the following: □ MATH 3350 □ MATH 3410 □ MATH 3420 □ MATH 3610\*  □ MATH 3740 □ MATH 4100 □ MATH 4200 □ MATH 4520  Algebra\*: One of the following: □ MATH 3400 □ MATH 3510\* □ MATH 3520 □ MATH 4430 □ MATH 4450  *\*At least one of Math 3510 and Math 3610 must be taken*  Advanced Mathematics Electives: Three (3) additional upper-level mathematics courses numbered 3350 or higher.  Recommended courses are MATH 3400, MATH 3410, MATH 3740, MATH 4450, and/or MATH 4610.  Computer Competency: □ CSCE 1020 (COSC 1315/1415) (recommended) *OR* □ CSCE 1030 (COSC 1436)  Laboratory Science: Choose one of the three sequences:  □ BIOL 1710/1730(1406) AND 1720/1740(1407) **+** ***EITHER*** CHEM 1410/1430(1411) **OR** PHYS 1710/1730(2425)  □ CHEM 1410/1430(1411) AND 1420/1440(1412) + ***EITHER*** BIOL 1710/1730(1406) **OR** PHYS 1710/1730 (2425)  □ PHYS 1710/1730(2425) AND 2220/2240(2426) + ***EITHER*** BIOL 1710/1730(1406) **OR** CHEM 1410/1430(1411)  *Students seeking certification in both* *math and physics are required to take PHYS 1710/1730(2425), 2220/2240(2426), 3010/3030, 3210, 3220 and 4700.* | |
| III. Minor in Mathematics and Science Secondary Teaching | | 21 |
| □ TNTX 1100: STEP 1, Inquiry Approaches to Teaching □ EDSE 4500 Project-Based Instruction  □ TNTX 1200: STEP 2, Inquiry-Based Lesson Design □ EDSE 4608 and 4618\* Student Teaching I & II in Math &  □ EDSE 3500 Knowing and Learning in Math and Science Science (See Core Requirements)  □ EDSE 4000 Classroom Interactions □ EDSE 4628 Student Teaching Seminar  □ PHIL 2600\* Ethics in Science (See Core Requirements) | |
| Total hours to meet MATH major requirements; including College of Arts & Science degree requirements. | | 89 |
| Professional Development sequence | | 21 |
| Electives (*EDSE 4060 and TNTX 3100 are recommended)* | | 10 |
| Total Hours to Complete Degree | | 120 |

**Advanced hours must total 42 and a minimum of 120 earned hours are required. Minimum gpa requirements are in force (2.5 overall, 2.5 UNT, 2.5 major concentration, 2.5 minor concentration, and 2.0 advanced hour) for graduation with Teacher Certification.**

SAMPLE 4-YEAR COURSE PLAN

**BS with a major in Mathematics leading to Mathematics Certification**

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| Fall Semester | | Spring Semester | |
| ENGL 1310, College Writing I  MATH 1710, Calculus I  PSCI 1040, American Government  CSCE 1020 (or 1030), Computer Science  TNTX 1100, Step 1: Inquiry Approaches to Teaching | 3  4  3  4  1  **15** | TECM 2700, Technical Writing  MATH 1720, Calculus II  MATH 2100, Functions and Modeling  PSCI 1050, American Government  Lab Science  TNTX 1200, Step 2: Inquiry-Based Lesson Design | 3  3  3  3  4  1  **17** |
| MATH 2700, Linear Algebra and Vector Geometry  MATH 2730, Multivariable Calculus  LANG 1010 or advanced technical writing  EDSE 3500, Knowing and Learning in Mathematics and Science  Lab Science | 3  3  3  3  4  **16** | MATH 3000, Real Analysis I  MATH 3680, Applied Statistics  PHIL 2600, Ethics in Science  Elective  LANG 1020 or advanced technical writing | 3  3  3  3  3  **15** |
| MATH Upper Level Analysis or Algebra Course (see pg 1 for options)  MATH Advanced Elective (3350 or higher)  HIST 2610, US History to 1865  MATH Upper Level Analysis or Algebra Course (see pg 1 for options)  Lab Science | 3  3  3  3  4  **16** | \*MATH 4050, Advanced Topics in the Secondary Mathematics Curriculum  \*MATH 4060, Foundations of Geometry  HIST 2620, US History since 1865  Social/Behavioral Sciences Core  EDSE 4000, Classroom Interactions | 3  3  3  3  3  **15** |
| MATH Advanced Elective (3350 or higher)  MATH Advanced Elective (3350 or higher)  EDSE 4500, Project-Based Instruction  Visual/Performing Arts Core  Elective  Elective | 3  3  3  3  3  1  **16** | Elective  EDSE 4608-4618, Student Teaching I & II in Math & Science  EDSE 4628, Student Teaching Seminar | 3  6  1  **10** |

**Total Hours: 120**

\*MATH 4050 AND MATH 4060 ARE ONLY OFFERED SPRING SEMESTERS. PLEASE SEE CATALOG FOR REQUIRED PREREQUISITES.

**All students seeking secondary level teacher certification must be admitted to UNT’s Teacher Education program. Admission to teacher education requirements follow:**

**~THEA exam scores (Texas Higher Education Assessment) of 240 or above in reading, 230 or above in mathematics, and 220 or above in writing*.* Information regarding the THEA exam can be found at the following website:** [**www.thea.nesinc.com**](http://www.thea.nesinc.com)**. Allowable exemptions to the THEA exam include SAT (minimum combined verbal and mathematics 1070 with a minimum of 500 in verbal and 500 in mathematics) or ACT (23 composite with minimum 19 in English and 19 in Mathematics) exams taken within 5 years of Teacher Education application, or TAKS scores (minimum 2200 in Mathematics and 2200 in English with a writing subscore of 3 or higher) taken within 3 years of Teacher Education application.**

**~Junior Standing (minimum of 60 earned hours)**

**~2.5 overall gpa**

**~2.5 UNT gpa**

**~Official degree plan on file (admission to major status)**

**~Teacher Education application**

**~State-required interview**

**Please see TNT advisor to complete application process. Continued enrollment in advanced education minor courses will be blocked until admission in obtained.**