## Required Courses for Students Majoring in Mathematics in the College of Science （applicable to students admitted in Fall 2008）

| Academic <br> Year <br> Semester <br> Course <br> Titles | First Year |  | Second Year |  | Third Year |  | Fourth Year |  |
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|  | Fall | Spring | Fall | Spring | Fall | Spring | Fall S | Spring |
| Common Required Courses （30） | Chinese（3） | Chinese（3） | History |  |  |  |  |  |
|  | Foreign Languages（3） | Foreign Languages （3） |  |  |  |  |  |  |
|  | 16 credit hours of General Education courses，of which one course must be from each of the following core areas：Humanities \＆Thought，Physical Science，Applied Science，and Social Thought \＆ Phenomenon．The remaining courses may be General Education electives． <br> One non－credit Physical Education course each semester of their first three academic years，two of which must be Freshman PE I and Freshman PE II． <br> One non－credit Service Education course in the fall and spring semester of an academic year． |  |  |  |  |  |  |  |
| Required <br> Courses of the <br> Department <br> （44） | Calculus MA1001 （4） | Calculus MA1002 （4） | Advanced Calculus I MA2045 （4） | Advanced Calculus II MA2046 <br> （4） |  | Complex <br> Analysis I <br> MA3015 <br> （3） |  |  |
|  | Linear Algebra I <br> MA2007 <br> （3） | Linear Algebra II MA2008 <br> （3） | Algebra I MA2025 <br> （3） | Probability and Statistics MA2022 <br> （4） |  |  |  |  |
|  | General Physics PH1001 <br> （3） | General Physics PH1002 <br> （3） | Elementary Differential Equations I MA2041 （3） |  |  |  |  |  |
|  | Intro to Computer I MA1013 <br> （3） |  |  |  |  |  |  |  |
| Core <br> Elective <br> Courses of the <br> Department <br> （12） |  | Intro to Computer II MA1014 （3） |  | Algebra II MA2026 （3） | Computer Programming and Application MA2051 （3） | Geometry I MA4005 <br> （3） | Numerical Analysis I MA3021 <br> （3） |  |
|  |  | Basic <br> Mathematics <br> MA1015 <br> （3） |  | Elementary Differential Equations II MA2042 <br> （3） | Mathematical Statistics I MA3025 <br> （3） | Topics in <br> Algebra <br> MA3031 <br> （3） |  |  |
|  |  |  |  |  | Advanced Calculus III MA2047 <br> （3） |  |  |  |
|  |  |  |  |  | Discrete Mathematics I <br> MA3034 <br> （3） |  |  |  |


| Total <br> Semester <br> Credit Hours | 19 | $16+6$ <br> （Electives） | 10 | $8+6$ <br> （Electives） | 12 （Electives） | $3+6$ <br> （Electives） | 3 （Electives） |  |
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Notes 1．The numerical figures in parentheses refer to course credit hours．
2．The minimum number of earned credit hours required for graduation is 128，which must include：
（1） 30 credit hours earned from the common required courses；
（2） 44 credit hours earned from the required courses of the Department；
（3） 12 credit hours earned from the core elective courses of the Department；
（4）another 12 credit hours earned from courses offered by this Department（undeclared majors in the College of Science and students majoring in math at the undergraduate level must obtain the approval of both their advisor and the head of this Department before taking any electives to fulfill the 12 elective credit－hour requirement and are not subject to this restriction）．
3．Math majors must take（but are not required to pass）＂LS1013 General Biology I and LS1014 General Biology II＂or＂CM1012 General Chemistry I and CM1007 General Chemistry II．＂（Credit hours of failed courses may not be counted toward the student＇s earned credit hours．）
4．Students taking Calculus I and II are required to earn an average grade in the two courses which is no less than the lowest passing grade before proceeding to Advanced Calculus I；those taking Advanced Calculus I are required to have received a grade of no less than 50 points before proceeding to Advanced Calculus II and III；those taking Complex Analysis I are required to have passed Advanced Calculus I；those taking Computer Programming and Application are required to have passed Intro to Computer I；those taking Mathematical Statistics I are required to have passed Probability and Statistics．
5．The calculation of semester hours shall not include credit hours earned from General Education courses or History．
6．First－year students may take any of the following to fulfill the University＇s foreign language requirement： （1）Freshman English；（2）other English courses offered by the English department；（3）six course credit hours of an alternative second－language offered or accredited by the Language Center．
7．Before being permitted to graduate，students must demonstrate their English proficiency by reaching a threshold score in one of the English proficiency tests recognized by the Language Center or by passing two semesters of Remedial English；credit hours thus earned may not be counted toward the minimum number required for a baccalaureate degree（for details，refer to the University＇s Implementation Procedures for Freshman Foreign Language Courses and Implementation Procedures for Remedial English Courses）．
8．Students are required to receive a passing grade in Service Education in accordance with the University＇s Service Education Implementation Procedures before being permitted to graduate．

