

**Action Plan For a Six-Year Program Review Cycle
Years: 2021-2026**

Department Mathematics and Computer Science

Please address the applicable areas of your program improvement and arrange them according to their priority.

| | A brief description of each proposed change | A brief rationale and evidence that support the proposed change | Six-year timeline for the proposed changes and actions | Who is in charge if known |
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| 1 | <p>Curriculum / program</p> <p>1.1 Revise the course offerings in computer science</p> <p>1.2 Discuss the creation of a minor in applied mathematics</p> <p>1.3 Offer differential equations within the mathematics department</p> <p>1.4 Consider offering even more applied courses while keeping the strength of the pure mathematics program intact</p> <p>1.5</p> | <p>These proposed changes are in response to the external review recommendations, but discussion of item 1.1 had also been brewing in the department.</p> | <p>1.1 Ongoing</p> <p>1.2 2021-2022 academic year</p> <p>1.3 Ongoing, to include discussions with physics and engineering departments</p> <p>1.4 Ongoing</p> | <p>Entire department, led by the department chair</p> |
| 2 | <p>Initiatives to improve teaching and learning</p> <p>2.1 Discuss the possibility of making MA 180 and MA 165 four-unit courses, and additional content to be covered in each course</p> | <p>2.1 The change in MA 180 will expand learning opportunities for senior majors, but the MA 165 change will require consultation with the Department of Education. The two changes will also facilitate</p> | <p>2.1 2021-2022 academic year</p> <p>2.2 2021-2022 academic year</p> <p>2.3 Ongoing, hopefully to be completed in the 2021-2022 academic year</p> | <p>Entire department, led by the department chair</p> |

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| | <p>2.2 Discuss with the E-team and Academic Senate the hiring of “Professors of Practice” in computer science</p> <p>2.3 Hire a tenure-track computer science faculty member</p> | <p>staffing within the mathematics program.</p> <p>2.2 Per recommendation of the external review team</p> <p>2.3 Vital for the continuation of the computer science program</p> | | |
| 3 | <p>Possible adjustments in faculty priorities or responsibilities</p> <p>3.1 Determine a general scheme for staffing various courses once revisions to the curriculum are complete</p> <p>3.2 Determine a general template for when courses will be offered</p> <p>3.3 Map out a plan for personnel occupying the role of departmental chair and for rendering administrative assistance while short staffed</p> | <p>3.1 To facilitate faculty planning</p> <p>3.2 To help students plan their long-term schedules</p> <p>3.3 To help faculty anticipate administrative responsibilities, and per recommendation from the assessment team</p> | <p>3.1 Depending on who is hired for computer science and when the hire occurs</p> <p>3.2 Depending on who is hired for computer science and when the hire occurs</p> <p>3.3 2021-2022 academic year</p> | Entire department, led by the department chair |
| 4 | <p>Learning outcomes that the department will assess in the subsequent years</p> <p>4.1 Reexamine the departmental mission statement and learning outcomes</p> <p>4.2 Assess Communication outcome</p> <p>4.3 Assess Creativity outcome</p> <p>4.4 Assess Christian Connection outcome</p> <p>4.5 Assess Core Knowledge outcome</p> | <p>4.1 This should be a normal activity at the end of every six-year review</p> <p>4.2 – 4.6 Comprise the normal review cycle</p> | <p>4.1 2021-2022 academic year</p> <p>4.2 Spring 2023</p> <p>4.3 Spring 2024</p> <p>4.4 Spring 2025</p> <p>4.5 Spring 2026</p> | Entire department, led by the department chair |

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| 5 | Reallocation or acquisition of resources that would be necessary or helpful in the pursuit of these goals 5.1 Additional CS faculty 5.2 Increase funding for TAs | 5.1 Needed to maintain a high-quality program 5.2 It is evident that more TA support is needed for the mathematics and computer science programs | 5.1 – 5.2 2021-2022 academic year | Entire department, led by the department chair |
| 6 | Other important changes | | | |