

## CIS/MACS Major Minor Degree Requirements Checklist 2019-2020

<b>CIS Major</b>	<b>MACS Major</b>	<b>CIS Minor</b>
15 Classes, 60 Credits  ___ CIS 210 <sup>1</sup> ___ CIS 211 <sup>1</sup> ___ CIS 212 <sup>1</sup>  ___ CIS 313 ___ CIS 314 ___ CIS 315 ___ CIS 330 ___ CIS 415 ___ CIS 422 ___ CIS 425 ___ CIS Upper Div. Track Elec. ___ CIS Upper Div. Track Elec. ___ CIS Upper Div. Track Elec. ___ CIS Upper Div. Track Elec. <sup>2</sup> ___ CIS Upper Div. Track Elec. <sup>2</sup>	10 Classes, 40 Credits  ___ CIS 210 <sup>1</sup> ___ CIS 211 <sup>1</sup> ___ CIS 212 <sup>1</sup>  ___ CIS 313 ___ CIS 314 ___ CIS 315  ___ Choose 1: ___ CIS 322, 330, 420, 422 ___ CIS 425 ___ CIS Upper Div. Elec. <sup>7</sup> ___ CIS Upper Div. Elec. <sup>7</sup>	6 Classes, 24 Credits  ___ CIS 210 <sup>1</sup> ___ CIS 211 <sup>1</sup> ___ CIS 212 <sup>1</sup>  ___ CIS 313     ___ CIS Upper Div. Elec. <sup>8</sup> ___ CIS Upper Div. Elec. <sup>8</sup>
7 Classes, 28 Credits  ___ MATH 231 <sup>1</sup> ___ MATH 232 <sup>1</sup> ___ MATH 251, 261, or 246 ___ MATH 252, 262, or 247 ___ MATH approved core list <sup>3</sup> ___ MATH approved core list <sup>3</sup>  ___ MATH/CIS Upper Div. Elec. <sup>4</sup>	11 Classes, 44 Credits  ___ MATH 231 <sup>1</sup> ___ MATH 232 <sup>1</sup> ___ MATH 251 or 261 ___ MATH 252 or 261 ___ MATH 253 or 263 ___ Choose 1: ___ MATH 316, 347, or 391 ___ MATH 341 ___ MATH 342 ___ MATH 351 or 461 ___ MATH 352 or 462 ___ MATH Upper Div. Elec.	2 Classes, 8 Credits  ___ MATH 231 <sup>1</sup> ___ MATH 232 <sup>1</sup>  <b>8 Classes, 32 Credits</b>  <b>CIT Minor</b> 3 Classes, 12Credits  ___ CIS 110 <sup>1</sup> ___ CIS 111 <sup>1</sup> ___ CIT 281 <sup>1</sup>
3 Classes, 12 Credits  ___ Science <sup>5,6</sup> ___ Science ___ Science	3 Classes, 12 Credits  ___ Science <sup>5,6</sup> ___ Science ___ Science	3 Classes, 12 Credits  ___ CIT 381 ___ CIT 382 ___ CIT 383
1 Class, 4 Credits  ___ WR 320 or 321	1 Class, 4 Credits  ___ WR 320 or 321	<b>6 Classes, 24 Credits</b>
<b>26 Classes, 104 Total Credits</b>	<b>25 Classes, 100 Total Credits</b>	

<sup>1</sup>B- or better grade required in CIS 210, 211, 212 and MATH 231 and 232 to advance to Upper Division Courses, or CIS 110, 111, and CIT 281 in the CIT minor.

<sup>2</sup>Maximum 8 individual study credits for example honors thesis or seminars (399-409). Additional courses numbered 410 and above also count.

<sup>3</sup>MATH Core List: MATH 253, 263, 341, 1 of 343/425

<sup>4</sup>MATH/CIS Upper Div. List: CIS 413, 420, 427, 473.

<sup>5</sup>See website – Physics, Chemistry, Biology, Geography and Geological Sciences, Psychology

<sup>6</sup>Students who complete a minor (other than CIT or Mathematics) or another major (including Mathematics) in a computer-related field may, with approval of a submitted petition, replace the CIS additional science requirement with the completed major or minor.

<sup>7</sup>At least one course must be numbered 410 or above

<sup>8</sup>Classes numbered 399-409 count towards minor only with prior departmental permission