

Concurrent Degree in Astrophysics and Engineering Checklist

Year 1: Admission Requirements (Minimum Grade)

NMM 1412A: Calculus I (60%)	☐	NMM 1414B: Calculus II (60%)	☐
Physics 1401A: Physics I (60%)	☐	Physics 1402B: Physics II (60%)	☐
NMM 1411A/B: Lin. Algebra (55%)	☐	Chemistry 1302A/B: Chem I (50%)	☐

NMM Math Courses – The Following 1.0 Credits Count to Both Degrees

NMM 2270A: App. Math. for Engineering II [<i>Fall – MWF – 8:30AM -9:30 AM</i>]	☐
NMM 2276B or 2277B: App. Math. for Eng. III [<i>Winter – MWF – 8:30AM – 9:30AM</i>]	☐

Remaining Module: 5.0 Physics Credits

Each of the following courses (3.0 total credits)

Physics 2101A: Intermediate Physics [<i>Fall – MWF 10:30AM -11:30 AM</i>]	☐
Physics 2104B: Intro to Quantum Mechanics [<i>Winter – MWF 10:30AM -11:30 AM</i>]	☐
Physics 2110A: Oscillations and Waves [<i>Fall – MWF 9:30AM -10:30 AM</i>]	☐
Physics 2910G: Intro to Physical Measurement [<i>Winter – MTW 9:30AM -10:30 AM</i>]	☐
Astronomy 3302A: Astrophysics of Interstellar Space [<i>Fall - Tu 9:30AM -10:30AM, Th 9:30AM -11:30AM</i>]	☐
Astronomy 3303A: Galaxies [<i>Fall – Tu 9:30AM -10:30AM, Th 9:30AM -11:30AM</i>]	☐

One of the following two courses (0.5 total credits)

Physics 3900G: Senior Physics Laboratory [<i>Winter – MW – 2:30 PM -5:30 PM</i>]	☐
Physics 3926F: Computer Simulations in Physics [<i>Fall – W – 2:30 PM – 4:30PM</i>]	☐

One of the following two courses (0.5 total credits)

Astronomy 2201B: Planetary Systems [<i>Winter - Tu 1:30 -3:30PM, Th 2:30 PM-3:30PM</i>]	☐
Astronomy 2801A: Observing the Stars [<i>Fall - Tu 1:30 -3:30PM, Th 2:30 PM-3:30PM</i>]	☐

One 0.5 credit from “Additional Course 1” and one 0.5 credit from any Physics or Astronomy course not yet taken numbered 2100 or above (1.0 total credits)

Additional Course 1: <i>Physics 3151A/B, Physics 3200A/B, Physics 3300A/B, or Physics 3400A/B</i>	☐
Additional Course 2: _____	☐

**Note: must also complete two non-credit seminar courses [Meetings Thurs 3:30pm-4:30pm]*

Physics 2950Y: Year Two Seminar	☐	Physics 3950Y: Year Three Seminar	☐
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***The above degree is only valid if an Engineering program at Western is completed concurrently*

****Total 1.0 Category B Arts and Humanities credits are required for the degree*