**ME RoboSub Senior Design Schedule**

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| **Goals** |

The main goals for the 2019 RoboSub project are to reduce the weight and size of the sub’s frame and reduce the amount of space taken up by the electronics system. Last year’s project will be used as a reference for these tasks. The weight of last year’s submarine is 98lbs, and we hope to reduce this to less than 85lbs. For the electronics system, we want a custom made dc-dc converter circuit board that has multiple voltage outputs, a custom servo control board, and a hydrophone control board. We hope that everyone will be dedicated to the project and will choose to attend the competition with the team next July!

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| **Fall Semester** |

Week 3 (Sep 2-8) Learn about the project

Week 4 (Sep 9-15) Learn about the project

Week 5 (Sep 16-22) Plan frame/hull weight reduction, review old circuit boards and electrical interface

Week 6 (Sep 23-29) Plan frame/hull weight reduction, research sensors

Week 7 (Sep 30-Oct 6) Plan frame/hull weight reduction, work on power distribution board schematic

Week 8 (Oct 7-13) Begin SolidWorks sub model, work on power distribution board schematic

Week 9 (Oct 14-20) SolidWorks sub design, power distribution board CAD/breadboard testing

Week 10 (Oct 21-27) SolidWorks sub design, work on servo board schematic

Week 11 (Oct 28-Nov 3) SolidWorks sub design, work on servo board schematic

Week 12 (Nov 4-10) Finish sub CAD model, servo board CAD/breadboard testing

Week 13 (Nov 11-17) Buy materials, research manufacturing costs, research electronic components/prices

Week 14 (Nov 25-Dec 1) Send out parts to be manufactured, order boards and components

Week 15 (Dec 2-8) Study :)

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| **Spring Semester** |

Week 1 (Jan 20-26) Weight calculations

Week 2 (Jan 27-Feb 2) Weight calculations

Week 3 (Feb 3-9) Assembly

Week 4 (Feb 10-16) Assembly

Week 5 (Feb 17-23) Component placement

Week 6 (Feb 24-Mar 2) Component placement

Week 7 (Mar 3-9) Documentation

Week 8 (Mar 10-16) Adjustments

Week 9 (Mar 17-23) Adjustments

Week 10 (Mar 24-30) Adjustments

Week 11 (Apr 7-13) Buoyancy testing/adjusting

Week 12 (Apr 14-20) Buoyancy testing/adjusting

Week 13 (Apr 21-27) Pool testing

Week 14 (Apr 28-May 4) Pool testing

Week 15 (May 5-11) Study :)

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| **Spring Semester** |

Week 1 (Jan 20-26) Wire thickness calculations

Week 2 (Jan 27-Feb 2) Hydrophone board schematic

Week 3 (Feb 3-9) Hydrophone board schematic

Week 4 (Feb 10-16) Hydrophone board CAD/breadboard testing

Week 5 (Feb 17-23) Order hydrophone board & components, soldering

Week 6 (Feb 24-Mar 2) Soldering components

Week 7 (Mar 3-9) Wiring the electrical interface

Week 8 (Mar 10-16) Wiring the electrical interface

Week 9 (Mar 17-23) Waterproofing

Week 10 (Mar 24-30) Waterproofing

Week 11 (Apr 7-13) Connectors

Week 12 (Apr 14-20) Connectors

Week 13 (Apr 21-27) Pool testing

Week 14 (Apr 28-May 4) Pool testing

Week 15 (May 5-11) Study :)