ME 491: Proposal for major projects in ME 492-493

Sponsor: PSAS

Project: OreSat Deployable Antenna

Proposal: P17

Proposal Score Maximum Scores Sub-Section Sub-Section Scores Score Comments score Score score Team 10 10 PDX email 5 5 Elective courses & skills 5 5 Client Needs/Market Opportunities & Design Challenges Project objective statement 7 8 Specify numerical value of budget One sentence format 3 3 Clear, concise, specific 2 2 Timeline, primary objective, cost 2 3 9 Client needs 15 List is complete -- includes primary customer needs 5 Needs work: Your list in Table 1 needs more detail -- more specific items. 2 Narrative text above Table 1 is helpful, but requires wading through 2 Client needs are grouped into primary & secondary 4 prose to extract specific items. A detailed table with one market Primary needs are sufficiently distinct 3 3 requirement (customer need) per row would be much more helpful. Client needs ranked by importance 2 3 Performance Measures 0 15 0 5 Performance measures, as a distinct list and in the format of Given as metric plus value and are useful Requirements matrix, are missing. Some performance measures (metric + At least one performance measure per primary client need 0 5 value) are buried in text. You need to make requirements easy to find. Needs-metrics matrix is complete 5 The Requirements Matrix provides one way of organizing the data and making interdependencies (or conflicts) between performance measures (and hence client needs) apparent. Design challenges 7 7 Identification of challenges 4 4 Plans reflect need to prioritize work on biggest challenges 3 3 Plans for completing the project Design techniques 25 25 Information gathering plans 6 6 Market analysis and external search 6 6 6 6 Plans for prototype development throughout timeline Engineering analysis methods and tools 7 Physical and other resources 8 10 A practical constraint on resources is that grant money is prescribed for Space, component, sensor and manufacturing needs 4 4 specific purchases an kinds of support. That won't be a problem (should't Practical constraints on resource acquisition & purchases 2 4 be a problem!) for your team, but you do need to be mindful of Anticipated needs for consulting or external expertise 2 2 procedures. Don't confuse tasks, which span a period of time, with milesones, which Key milestones and deliverables 9 have a specific date and should be coupled to major events or decisions Milestones with specific dates linked to project evolution 4 5 associated with the fate of the project. Deliverables linked to specific outcomes 5 5 100 75 75 100

Fall 2017

Overall comments