| ID | Task Name | Work | Duration | 29 May '17 5 Jun '17 12 Jun '17 19 Jun '17 26 Jun '17 S T T S M W F S T T S M W F S T T S |
|-----|---|---------|-------------------|---|
| 1 | Project Hybrid UAV | 431 hrs | 5 days? | |
| 2 | 1. Project Start-Up | 400 hrs | 5 days | |
| 31 | 2. Project Definition | 404 hrs | 4,88 days | |
| 62 | 3. Conceptual Design | 1.143 | 17 days | |
| 89 | 4. Conceptual Subsystem Design | 157 hrs | 9 days | |
| 90 | 4.1 Preliminary Design Phase Initialization | 29 hrs | - | |
| 91 | 4.1.1 Update technical task division and form subsystem teams | | 1 hr | 10 |
| 92 | 4.1.2 Generate compliance matrix | 3 hrs | 3 hrs | 1 2 |
| 93 | 4.1.3 Generate H/W S/W block diagram | 15 hrs | 15 hrs | 3 |
| 94 | 4.1.4 Perform risk analysis | 7 hrs | 7 hrs | 1 |
| 95 | 4.1.5 Update resource allocation/budget breakdown | 3 hrs | 3 hrs | 1 2 |
| 96 | 4.2 Sub-system Conceptual Design | 52 hrs | | |
| 97 | 4.2.1 Do concept generation | 20 hrs | • | 7 |
| 98 | 4.2.2 Perform parameter sensitivity analysis | 8 hrs | | 3 |
| 99 | 4.2.3 Market analysis | 12 hrs | | 3 |
| 100 | 4.2.4 Subsystem concept trade | 12 hrs | | 7 |
| 101 | 4.3 Sub-System Concept Integration Phase | | 2,5 days | |
| 102 | 4.3.1 Technical team informing | 4 hrs | • | 10 |
| 103 | 4.3.2 Subsystem concept selection | 8 hrs | | 6 |
| 104 | 4.3.3 Update function flow diagram | 2 hrs | | |
| 105 | 4.3.4 Update function break-down | 2 hrs | | |
| 106 | 4.3.5 Create electrical block | 6 hrs | | 2 |
| 107 | 4.3.6 Create communcation flow diagram | 6 hrs | | |
| 108 | 4.3.7 Data handling block | 16 hrs | | 2 |
| 109 | 4.3.8 Assembly and integration plan | 16 hrs | | 2 |
| 110 | 4.4 End-Conceptual Subsystem Design Phase | 16 hrs | | |
| 111 | 4.4.1 Perform end-conceptual design per sub-system | 8 hrs | - | 6 |
| 112 | 4.4.2 Verify with required specifications | 6 hrs | | 6 |
| 113 | 4.4.3 Perform necessary iterations | 2 hrs | | 6 |
| 114 | 5. Preliminary Design | | 12 days | |
| 115 | 5.1 Preliminary Subsystem Design Phase | 34 hrs | - | |
| 116 | 5.1.1 Perform preliminary design per subsystem | 16 hrs | - | 10 |
| 117 | 5.1.2 Make cost breakdown structure | 8 hrs | | 3 |
| 118 | 5.1.3 Update operations and logistics concept description | 2 hrs | | 2 |
| 119 | 5.1.4 Technical (CAD) drawings | 8 hrs | | 2 |
| 120 | 5.2 Performance Analysis | 46 hrs | | |
| 121 | 5.2.1 Generate payload/range diagram | 16 hrs | - | 3 |
| 122 | 5.2.2 Generate flight envelope | 8 hrs | | 3 |
| 123 | 5.2.3 Sustainability analysis | 14 hrs | | 2 |
| 124 | 5.2.4 Analysis VTOL capabilities | 8 hrs | | 2 |
| 125 | 5.3 Structural Analysis | 24 hrs | | |
| 126 | 5.3.1 Analyse critical structural components | 8 hrs | - | 3 |
| 127 | 5.3.2 Subject critical components to FEM analysis | 16 hrs | | 3 |
| 128 | 5.4 Manufacturing of Structural Components | 24 hrs | | |
| 129 | 5.4.1 Consider manufacturing techniques | 16 hrs | - | 3 |
| 130 | 5.4.2 Select manufacturing method | 8 hrs | | 3 |
| 131 | 5.3 Control and Stability Analysis | 40 hrs | | |
| 132 | 5.5.1 Aerodynamics charateristic analysis | 8 hrs | - | 4 |
| 133 | 5.5.2 Static stability | 16 hrs | | 2 |
| 134 | 5.5.3 Dynamic stability | 8 hrs | | 2 |
| 135 | 5.5.4 Controllability | 8 hrs | | 2 |
| | J.J. T Controllability | 0 1113 | 0 1113 | |

| ID | Task Name | Work D | Duration | 29 May '17 | | | | 5 Jun '17 | | | 12 Ju | 12 Jun '17 | | | 19 Jun '17 | | | 26 Jun '17 | | |
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| | | | | S | Т | Т | S | М | W | F | S | Т | Т | S | M | W | F | S | Т | |
| 136 | 5.7 RAMS Characteristic Analysis | 16 hrs 2 | 2 days | | | | | | | | | | | Į. | - | I | | | | |
| 137 | 5.6.1 Adress safety functions | 4 hrs 4 | l hrs | | | | | | | | · | | | | 4 | | | | | |
| 138 | 5.6.2 Evaluate redundancy measures | 8 hrs 8 | 3 hrs | | | | | | | | | | | | 4 | | | | | |
| 139 | 5.6.3 Reliability and availability estimations | 4 hrs 4 | l hrs | | | | | | | | | | | | | 4 | | | | |
| 140 | BUFFER | 24 hrs 3 | days | | | | | | | | - ' | | | | | | 10 | | | |
| 141 | 6. Project Close-Out | 66 hrs 6 | days | | | | | | | | ' | | | | | | | | | |
| 142 | 6.1 Final Design Review | 12 hrs 9 | days | | | | | | | | | | | Ţ | | | | | | |
| 143 | 6.1.1 Present final design | 8 hrs 8 | 3 hrs | | | | | | | | | | | | | | | | 5 | 10 |
| 144 | 6.1.2 Final (updated) technical (CAD) drawings | 4 hrs 4 | l hrs | | | | | | | | | | | | 1 | | | | | |
| 145 | 6.2 Final Report | 30 hrs 1 | .0 days | | | | | | | | | | | (| | | | | | |
| 146 | 6.2.1 Update project Gantt chart | 2 hrs 2 | hrs | | | | | | | | · | | | | 1 | | | | | |
| 147 | 6.2.2 Project development logic | 4 hrs 4 | l hrs | | | | | | | | | | | | 2 | | | | | |
| 148 | 6.2.3 Final quality control | 16 hrs 1 | .6 hrs | | | | | | | | | | | | | 10 | | | | |
| 149 | 6.2.4 Updated version of final report | 8 hrs 8 | 3 hrs | | | | | | | | | | | | | | | | | 10 |
| 150 | 6.3 Project Presentation | 24 hrs 3 | days | | | | | | | | - ' | | | | | | | | | |
| 151 | 6.3.1 Poster | 8 hrs 8 | 3 hrs | | | | | | | | <u> </u> | | | | | | | | 10 | |
| 152 | 6.3.2 Make presentation | 8 hrs 8 | 3 hrs | | | | | | | | | | | | | | | | 10 | |
| 153 | 6.3.3 Divide topics | 1 hr 1 | hr | | · | | | | | | | | | | | | · | | 10 | |
| 154 | 6.3.4 Rehearse presentation | 7 hrs 7 | hrs | | | | | | | | <u> </u> | | | | | | | | | 10 |