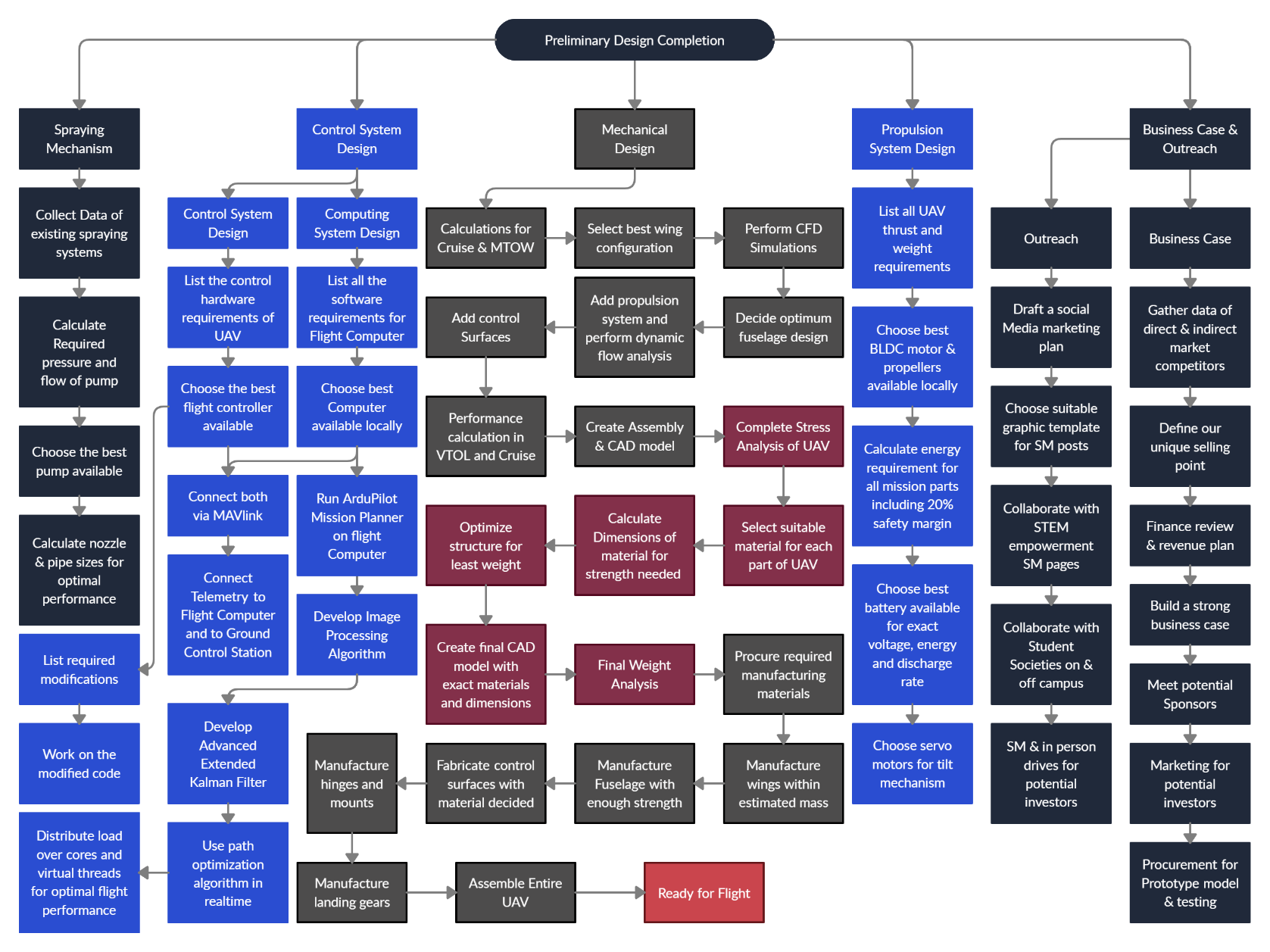
For Critical Design Process and stages after this, the team is divided into 5 groups as following:

* **Mechanical Design Team**
* Sarah Naeem
* Jawad Akbar
* Hamza Hussain
* Muhammad Hassan Kazmi
* **Spraying Mechanism**
* Saad bin Tariq
* **Business Plan & Outreach**
* Muaz
* **Electric Power & Propulsion Design Team**
* Hassaan Ghazali
* Ali Khalid
* **UAV Control & Computing System**
* Muhammad Adeel
* Ahmad bin Mushtaq

Following is Project Workflow Chart for all 5 teams:



# A summary table for Resourcing, manufacturing & risks:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Project Part | Human Resource | Other Resources | Procurement | Manufacturing/ Development | Risks | Mitigation |
| Spraying Mechanism | Saad bin Tariq |  |  |  |  |  |
| Flight Control System | Ahmad bin Mushtaq | ArduPilot source code, Pixhawk 2.4.8 | Open-source software + local available hardware | Fork the ardupilot repo and develop & compile firmware locally | Malfunctioning custom firmware | Continuous trial & error on in real-time flight |
| Computing System | Muhammad Adeel |  |  |  |  |  |
| Aerodynamic Design |  |  |  |  |  |  |
| Structure Design & Stress Analysis |  |  |  |  |  |  |
| CAD model |  |  |  |  |  |  |
| Manufacturing |  |  |  |  |  |  |
| Propulsion System Design | Muhammad Hassaan Ghazali |  |  |  |  |  |
| Battery & Power distribution design | Ali Khalid |  |  |  |  |  |
| Social Media Outreach | Muaz |  |  |  |  |  |
| Business Case | Muaz |  |  |  |  |  |

Project progress managed using Project Tracker on Google Drive. All files in project including CAD models, reports, simulations, source codes, etc. are managed on Google Drive & [GitHub repository](https://github.com/AhmadBinMushtaq/UAS_Challenge).

Graphical user interface, text, application, email

Description automatically generated

Moreover, weekly combined team meetings, occasional team meetings with faculty advisor and regular meetings of different groups ensure timely completion of work and maintenance of Project Progress tracker. Communication is done via MS Teams for meetings, WhatsApp group for regular updates and Emails for notifications & announcements.