## **Code of Conducts**

Team 4

High Speed Motor Test Rig



## Members:

Durval Marques (dm15s)

Leonardo Branco (lc15d)

Francisco Barreto (fjb11b)

Thyeasha Joseph (tlj11f)

Matthew Ketchum (mrk13g)

Faculty Advisor: Dr. Patrick Hollis

Sponsor: Danfoss Turbocor

Instructor: Dr. Nikhil Gupta

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#### **Mission Statement**

The Turbocor 1 team will work in unison to design an efficient high speed motor test rig. Each member will be expected to provide equal efforts and conduct themselves in a professional fashion. Our work will apply the engineering skills that have been instilled and developed throughout the Mechanical Engineering curriculum in order to meet the client's needs. Team 4 understands the rigor that this project entails and will strive to work with a positive attitude to reach the end goal.

#### **Team Roles**

Roles were assigned to each group member according to the unique talents they possess.

#### **Team Leader- Matthew Ketchum**

The Team Leader will be responsible for insuring the project stays on tract and managing the tasks. This individual will also stay in close correspondence with the sponsor and their project advisor. Duties also include scheduling informal and formal meetings as well as resolving disputes.

#### **Financial Advisor-Francisco Barreto**

The Financial Advisor will be in charge of managing the group's expenses and making sure the final project is completed within the budget. This will require that the Financial Advisor keeps a record, such as a spreadsheet, to document all credits and debits associated with the project. The Financial Advisor will be in charge of ordering supplies and will consult the group and the project advisor before doing so.

#### Secretary-Thyeasha Joseph

The Secretary will work to keep a project time log and keep record of the communications between the team and sponsor. This individual will be the communication liaison between the team leader and the other group members. They will also promote a positive work environment and synergy. Their work will also include presentation planning and preparation.

#### Webmaster-Leonardo Branco

The Webmaster will be responsible for designing, managing and updating all the content of the project website. These updates will include documenting the project milestones and progress on the webpage. This webpage will showcase all project details for the reading of peers, sponsors and engineering college faculty.

## **Lead ME-Durval Marques**

The Lead ME will be responsible for mechanical engineering aspects of the project. He will work with the team and the sponsor to determinate the main aspects of the technical solutions. He will also be in charge of all CAD and possible computer simulations. Additionally, he will communicate with the Team Leader and the Financial Advisor for further group involvement and supply purchasing.

#### **Communications**

Primary communication between group members will be done via cell phone through calls and text messaging. This will allow for fast and efficient communication. For formal correspondence with the sponsor and file transfers, the team will use E-Mail. This will allow for larger file transfers as well keeping a professional relationship with the sponsor.

As a secondary form of communication between members only, a Facebook page and a Drop Box will be utilized. This will allow for quick announcements and a secure place for file access/transfer.

To overcome a language barrier with the Brazilian exchange students, the American members will practice patience and demonstrate efforts for a clearer understanding. Additionally, the Brazilian students will work with the American students to improve the communication.

#### **Team Dynamics**

The students will work as a team while allowing one another to feel free to make any suggestions or constructive criticisms without fear of being ridiculed and/or embarrassed. If any member on this team finds a task to be too difficult it is expected that the member should ask for help from the other teammates. If any member of the team feels they are not being respected or taken seriously, that member must bring it to the attention of the team in order for the issue to be resolved. We shall NOT let emotions dictate our actions. Everything done is for the benefit of the project and together everyone achieves more.

### **Ethics**

All members will abide by the NSPE Engineering Code of ethics when working with teammates, sponsor and faculty. Negative talk behind others' back will not be tolerated. In the event of severe breach of the code of ethics, members will seek help from higher authority. It is each member's responsibility to behave professionally regardless of the circumstances.

#### **Dress Code**

All informal group meetings will be in casual attire. Meetings with sponsor and project advisors as well as presentations, will be in business casual or formal attire. It will be up to the group's discretion what the appropriate attire will be.

#### Weekly and biweekly Tasks

Team members will participate in all meetings with the sponsor, adviser and instructor. During said times ideas, project progress, budget, conflicts, timelines and due dates will be discussed. In addition, tasks will be delegated to team members during these meetings. Repeat absences will not be tolerated.

#### Meetings

Group members will meet weekly to discuss project matters such as budget, deadlines and technical aspects. All members will make required efforts to attend these meeting unless a properly documented excuse is presented to the Team Leader. Meetings between the group members will be

primarily held at the College of Engineering, if timing issues arise, meeting time and place will be adjusted. It is imperative that all members are present because of each members' unique involvement. Meetings with the sponsor will be coordinated by the Team Leader and held at a location and time most convenient to the sponsor.

#### **Decisions**

All group decisions will be consistent with the Engineering Design Process. The team will use Brainstorming to accumulate a variety of possible solutions to the Problem Definition. A democratic voting process will be held for making the best decision. Members are encouraged to voice opinions and concerns in order to thoroughly evaluate proposed decisions, these objections must be researched and professionally composed. A majority vote, three of the five members, will be needed in order to pass a group decision. Below are the steps to be followed for each decision-making process:

- Problem Definition Define the problem and understand it. Discuss among the group.
- Tentative Solutions Brainstorms possible solutions. Discuss among group most plausible.
- Data/History Gathering and Analyses Gather necessary data required for implementing Tentative Solution. Re-evaluate Tentative Solution for plausibility and effectiveness.
- Design Design the Tentative Solution product and construct it. Re-evaluate for plausibility and effectiveness.
- Test and Simulation/Observation Test design for Tentative Solution and gather data. Reevaluate for plausibility and effectiveness.
- Final Evaluation Evaluate the testing phase and determine its level of success. Decide if design can be improved and if time/budget allows for it.

#### **Dispute Resolutions**

Ideally, all group interaction will be done in a peaceful and smooth manner, but in the event of a group conflict the following actions will be taken:

- Identify the cause of the dispute.
- Both parties will voice concerns and listen to the opposing side (all members must be involved).
- A majority vote will be taken to determine the next appropriate action.

# Agreement

By signing this I agree to the above code of conducts and understand its principals.

NAME	SIGNATURE	DATE
Durul M. Le Q. Neto	Junal M. Le Q. Noto	<u>09/09/2</u> 0ls
Leonardo Cobra Branco	Leonard Edrobranco	09/09/2015
Mathew Ketchum	Mathen hother	9-9-2015
Thyeasha Joseph	Flycosh Jul	9-9-2015
Francisco Borret	- Free Mary	<u>9-9-</u> 2015
Ber	Zili Sun	9-4-15