

# ME 72 2010-2011

## Budget Allowance and Procedure

### Budget Allowance

Your team will have a total budget of **\$1200**. Note that this is for both terms, and that some significant portion of your budget (~25%) should be spent on prototyping (but we're not checking). You will be graded on your ability to stay within budget, but like in many work environments, this is not a hard constraint. If you have to spend \$1250 to make some amazing robots, that's OK - talk to us and document your reasons, and we will not penalize a little overrun too harshly. On the flip side, if you can make fully functional robots for \$600, great – there will be bonus points.

In addition, half or more (\$600+, if you spend it all) of your expenditures must be from the Caltech ME shop. The other half can come from outside sources, such as Hobby People and McMaster Carr. That means that if you spend your whole budget, \$600-\$1200 must be spent on ME shop materials such as acrylic, aluminum, batteries, motors, speed controllers. In addition, you must return all non-consumables (i.e. the electronics) to the ME shop at the end of the course, unharmed and unaltered.

### Budgeting Procedure

If you want to buy something:

- 1) Plan. Check on what you've already bought and intend to buy; make sure you have enough money (with some padding, just in case!).
- 2) Fill out the Purchase Order form (posted on the website). It should include:
  1. A specific name or description of what you want, with a part number.
  2. How many you want, and how much each costs.
  3. Where to buy it: website, catalog, contact info of a person you spoke to after getting a quote... whatever is relevant, just make it easy for us. Fill out a separate Purchase Order for each vendor.
- 3) On a separate sheet, with your team name and team members' names, write the following:
  1. Justification. Describe why you need it.
  2. If you are buying anything electronic: You *must* use the radio controllers, batteries, and speed controllers from the ME shop. You may, however, buy things like motors from outside sources. However, you first must show us that they aren't going to blow out our speed controllers or short our batteries. Do your homework on voltage, connector type, power draw, etc. Show some analysis or explain why your electrical part will work with ours.
- 4) Send your Purchase Order and justification to the staff email list ([me72-staff@caltech.edu](mailto:me72-staff@caltech.edu)) or show it to one of us in person, for approval.
- 5) Once your purchase has been approved, take the Purchase Order to Maria Koeper and ask her (nicely!) to order it for you. Arrange pickup; you can have it sent to the shop if you want.
  1. If you want, you can buy parts yourself. You must still get them approved beforehand; then save the receipt and talk to Maria about getting reimbursed. Expect to wait some time for reimbursement if it is a big purchase and can't be done with petty cash.
- 6) Go to the [budget website](#) budget and enter your purchase.
  1. On the opening page, type YOUR team name, and click 'Go'

**To make a purchase:**

2. Select items by double clicking on them, you can add multiple of that item at once by first setting the quantity.
3. Clicking on items in your cart will remove them (or refresh the page to clear your entire cart)
4. Click 'Purchase' to finalize purchase
5. You can keep track of your remaining budget at the bottom of your team page.

**Notes:**

- Please only purchase things as you are using them, as there is no good way to return items. If for some reason you need to return an item, contact Suzanna to get reimbursed for it.
- After your outside parts approved, contact Suzanna to have them added to the inventory.
- If you have any other questions or problems with the interface, contact Suzanna.