

Course 13 Merger Discussion Summary

The following are the comments and questions resulting from individual lab discussions about a possible merger with course 13. The comments are grouped by lab, because the labs research interests helped shape the responses. However, there were a few points mentioned by almost every lab: Many labs expressed the worry that Ocean engineering will appear on all graduate degrees. Graduate students do not want their degree names to include Ocean Engineering. Most also proposed that this problem can easily be solved by offering multiple degree titles. All, but one lab, expressed an interest in being involved in whatever process would take place if the merger occurs. Finally, many questions remained about the merger and students expressed a desire to know more detailed information about the changes that would occur in the department if a merger took place. Aside from these general comments there were many others both for and against a merger. For example, one lab believed that continuing to add disciplines would add strength to the department, while another feared that too much diversity would make the department fragmented. Finally, some labs provided alternatives to a merger, for example making Ocean Engineering an interdisciplinary division.

LIDS

- Will we get to choose what is written on our degree? Some students will not want a degree involving ocean engineering.
- How would classes change? We don't think it is a good idea to mix application-oriented classes, although theoretical ones might be ok.
- The merger would be ok as long as there are the same or more opportunities open to aero/astro students
- In general people were rather lackluster; a couple seemed to mildly dislike the idea, and the rest were pretty indifferent. The students seemed to think the merger would effect future students more than the current ones.

ICAT

The community of graduate students in ICAT sounded interested in being involved in the topic of the merger if the department decides to go forward with it. It also appeared that it would be beneficial to understand in more details the potential impacts of a merger with Ocean Engineering. Some favorable points and some concerns were raised and are briefly mentioned below. To summarize, I think that the graduate students in ICAT were potentially in favor of the merger with the condition that some of their concerns would be appropriately addressed.

Favorable Points

- Aero/Astro and Ocean Engineering are both departments based on domain applications and researchers interested in system-level questions would benefit from considering oceanic, atmospheric and spatial issues together. Therefore some students would see it beneficial to have an opportunity to collaborate with ocean engineering professors and students.
- It was perceived that the merger could potentially lead to a larger budget in the department, which is desirable;

Concerns

- The merger and sudden enlargement of the department may bring an atmosphere of a more impersonal community (e.g., EECS), which is not desirable.
- The reputation of the department of Ocean Engineering was not known to the grad students in ICAT, but it was felt that it may affect the reputation of Aero/Astro accordingly. A concern was raised with regard to how the merger would affect the vision of the department for the next decades, and hence how the department is perceived within and outside of MIT.
- Concerns were raised with regard to the name of the department. It was felt desirable by some students to keep the name of the department, or at least the option to keep the Aero/Astro name on their degrees upon graduation.
- Issues on (larger) class sizes were raised. It was observed that the impact may be little in classes that are related to ICAT researchers' interests.
- The potential impact on the qualifying examinations and the potential corresponding needs for more diversification in the topical areas of the quals were raised as concerns. This would not be desirable and should be avoided if possible.

SSL (8 students)

There was a general agreement that we should have an “open arms embracement” attitude towards the merger

Positive Comments:

- The merger will Increase the strength of our department, by making it more interdisciplinary
- There will be more fluids and maybe structures classes which will help strengthen the fundamentals of our department
- There were worries that maybe we are next (to get phased out of the department), or more that Years from now, we will head down the path that ocean Engineering is heading now. So by merging with them now, we are larger and bigger and this is less likely to happen. For ex: we may merge with EECS (since aero/astro is becoming so much more IT oriented)
- We were all unsure on what the downsides of the merger are.
- Are we going to have to cut people in aero to make room for more money? Are we going to merge budgets or just stay with the current budgets and add people (and thus delete people elsewhere – this was viewed as being bad)
- Where are the cost savings?

On classes

- People were interested in obtaining more structures classes
- Students were interested in taking sailboat design and naval propulsion classes

The Big Issue!

- Students did not want the Ocean Engineering name on their degrees.
- We should have a choice to have just AA or AAO on the degree.

- The name is a huge issue, AA is already too long, maybe if it was just aerospace instead of aero/astro, then maybe, aerospace and ocean is more acceptable.
- On the current department vision and how ocean fit into it: CDIO is okay so far, In general it would be nice if ocean brings in more fundamentals
- Lastly, on involvement of grad students: absolutely, there is a personal stake of many of us in the department, and people said they would be interesting in attending the committee

LR-Draper

- Ocean Engineering fits better with Mechanical
- Could disperse into many departments
- Make into a pseudo department like TPP
- Already limited cohesion in department, merger makes it worse
- Nobody likes the name

Some Questions that came up

- Do any of the current 13 courses overlap with 16 courses?
- Would there be a dual degree Aero/Astro and Ocean, or would the Ocean degree be separate?
- Would Aero/Astro majors be expected to know Ocean Engineering topics by people in industry or for the qualifying exams?
- How much current cross registration exists between course 16 and course 13? Are there any course 16 major taking 13 classes or course 13 majors taking 16 classes?

The general result is that there are no real advantages to the current department to add ocean engineering, so the merger is not wanted.

GTL (17 students)

In general, graduate students in the Gas Turbine Laboratory wanted more information about the merger before deciding whether it was something the department should consider doing. A small minority of students were completely against it. The types of questions that were brought up are as follows:

Questions:

- What will be the benefits to the department in terms of additional resources (money, lab space, classroom space, office space)?
- Is keeping the Ocean Engineering name absolutely set in stone?
- Would it change our graduate curriculum or requirements?
- How much overlap is there between Course 13 and Course 16?
- How do the Course 13 faculty and staff feel about the merger?
- How long would it take for the process of merging the departments take?

- Will we get more resources? Or will current resources be stretched thinner over a larger department?
- What are the space considerations? Would this also be a physical merger of current facilities?
- Have other departments at MIT merged in the past? What were the results?

Comments:

- A large majority of students do not want our department called Aero, Astro and Ocean Engineering. They would not want “Ocean Engineering” on their degrees.
- Other students wanted to know if Ocean Engineering could just become a graduate division, instead of being a department. There was also concern that the merger would become the focus of the department, just at a time when the department has decided to focus more on the graduate program.
- The general feeling was that there is not enough information for most students to say whether they supported the merger or not. Most were glad to know the department wanted their opinion, but need more specifics on how things would “go down” if it did happen.

MVL (8 students)

Positive comments:

- The merger makes sense for some topics, like navigation and fluids.
- New perspectives of learning and teaching.
- There would be opportunity for new collaborations within the department, but there were concerns that the department isn’t too good at this.
- The course 13 department would bring more common facilities.
- OE has lost of hands-on work that will work well with CDIO-like classes and they have more of a scientific focus which we could learn from.

Ambiguous comments:

- Most students were not happy with the idea of adding Ocean Engineering to the department name.
- We are not aware of how the merger would affect students at the graduate level.
- There is a concern that the department will lose its identity?

Negative comments:

- Will course 13 be unhappy because Aero/Astro will take over their space?
- The group found that the reasons given were not compelling for a merger.
- The department already lacks synergy, and adding a third community would make this problem worse.
- There were strong concerns about the undergrad curriculum.
- The merger does not seem like an obvious choice from the perspective of an outsider.

- We could be diluting the department by adding another discipline.

ACDL (10 students)

- When presented with the possible departments that Course 13 might merge with, people agreed that Course 16 would be the best choice and best suited to handle the merger. The point was made and found widespread agreement that our department is already extremely diverse. From ICAT to space to aero to human factors, there are a lot of different disciplines. A student in ACDL has very little in common with a student in MVL or ICAT in terms of research. Adding on an Ocean Engineering division to the Department wouldn't be any different than when MVL was added to the Department.
- In this light, people said they would not consider directly working for a Course 13 advisor, just as they wouldn't work for an MVL advisor, but they might be open to taking an Ocean centered class.
- From an ACDL, fluids point of view, people thought that adding Ocean classes and Ocean examples to current classes would be good for topic diversity and learning in classes.
- When asked about the Department community, it was thought that while Course 13 might dissolve, their facilities (like the water tunnel) would remain. Keeping those facilities and students working with those facilities would make it difficult to blend the departments into one community.
- When asked whether incorporating Course 13 is coincident with the Department's direction, the overwhelming response was that with a new DH, there is no clear direction for the Department yet, so that question cannot be fully addressed.
- A keen point was made that one of the reasons Course 13 is being dissolved is that there is no industry or stake holders to support it beyond the Navy in the US. Since industry is the biggest driver of research and money coming into the Department, would adding Course 13 be like adding a paralyzed limb? Could they really contribute to the Department?