

Aerospace Studies

The mission of the Department of Aerospace Studies, also known as Air Force Reserve Officer Training Corps (Air Force ROTC), is to populate this detachment, and ultimately the university, with top-notch students, retain them, and produce top quality officers for the United States Air Force. This mission statement demonstrates that the department serves two different institutions. The College of Sciences and Arts recognizes that the Air Force ROTC program must be guided by its mission to the U.S. Air Force and the country at large, and agrees that by doing so, it also advances the interests of the university. This document adopts as a template the university's plan, and highlights those elements and activities where the Air Force's program aligns most directly with those of Michigan Tech.

Objectives for upcoming year (Academic year 2010-2011)

Using the general directive above, our immediate objective areas follow in accordance with the Air Force's National Recruiting Strategy and align with Michigan Tech's strategic objectives:

- Priority number 1! "Interest the Qualified not Qualify the Interested!!"
- Attract more walk-ons and late enrollments by recruiting heavily on campus with a specific focus on the Express Scholarship program without compromising recruitment of the general population. We have to interest more highly qualified Computer, Electrical and Environmental Engineers.
- Interest more High School Students by promoting the High School Scholarship Program (HSSP). We more than doubled HSSP applications with MTU interest last year. The more applicants we have...the more scholarship recipients will choose to come to Michigan Tech. Additionally, those that don't receive scholarships might still come hoping for in-school scholarships. To accomplish this we will continue to e-mail, call, send packages to all Michigan Tech HSSP applicants, attend college fair circuit, e-mail all guidance counselors regularly, email all accepted Michigan Tech students, speak at local schools, meet with prospective students on campus tours and mail packages to Air Force and Army JROTC classes.
- (MTU Goal #1) Increase the number of minority students in the detachment. Recruit minority students at national college fairs with Regional Director of Admissions (RDA) funding. Obtain visibility with minority schools outside local area with the help of the RDA, Gold Bar Lieutenants (newly commissioned Second Lieutenants focused on minority recruiting in key areas across the United States) and Michigan Tech's admissions regional managers.

Goal #1 - Attract and Interest Qualified

Significant Recruiting Challenges and Limitations

There is a small minority population in our area of responsibility (AOR) which is most of the Upper Peninsula of Michigan and a small part of Northern Wisconsin. We have been successful recruiting a few minorities but it remains difficult. There are no minority fraternities or sororities in the area (confirmed by the assistant director of student activities). The largest minority feeder school for Michigan Tech is not in our AOR, it's in Detroit (Cass Tech High School). All of Michigan Tech's top minority feeder schools only bring in 2-5 minority students. Michigan Tech's minority population is only 4.5%. To

overcome these minority challenges, our RDA attends the Chicago and Milwaukee national college fairs where a larger minority presence exists and distributes our literature. Additionally, our RDA has access to a Gold Bar Lieutenant who focuses on minority recruiting.

Historical Data in Recruiting and Commissioning Students

Class Size Data

Class	Cadets (Goal)	AY05-06	AY06-07	AY07-08	AY08-09	AY09-10	AY10-11 (Projected)
AS 100 (Freshmen/1 st or 2 nd Years)	30	25	19	11	23	43	44*
AS 200 (Sophomores/2 nd or 3 rd Yrs)	30	14	13	17	13	23	35
AS 300 (Juniors/3 rd or 4 th Years)	21	11	8	8	7	9	17
AS 400 (Seniors/4 th or 5 th Years)	18	12	11	14	9	9	7
Totals	99	62	51	50	52	84	103
Female	10	7	6	8	10	14	19
Minority	3	?	1	2	1	3	2
Tech Degrees	89	?	43	37	41	71	94

Commissioning Data

	FY06	FY07	FY08	FY09	FY10	FY11 (Projected)
Total	10	9	7	9	5	6
Female	2	0	1	1	1	0
Minority	0	0	0	0	1	0
Tech Degrees	7	9	7	6	4	6

Goal #2 - Experiential Learning

Air Force ROTC has historically included experiential learning in its program. The laboratory portion of the class, known to cadets as Leadership Laboratory (LLAB), is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and

expectations of prospective Air Force second lieutenants and complement the Air Force ROTC academic program. It is a student-planned, organized and executed practicum conducted under the supervision of the department chair (detachment commander) and the commandant of cadets.

The goals of our LLAB program are to:

1. Provide first-year cadets an informative and motivational program designed to recruit, retain, and familiarize cadets with the Air Force way of life and foster leadership, followership, teamwork, and esprit de corps.
2. Provide cadets scheduled to attend field training with the mental and physical skills needed to succeed in the AFROTC field training environment.
3. Provide cadets returning from field training sufficient opportunities to demonstrate and develop the leadership and management skills needed to successfully function as an active duty officer.
4. Provide cadets to be commissioned additional opportunities to demonstrate and develop the leadership and management skills needed to successfully function as an active duty officer and to adequately prepare them to transition from the ROTC environment to active duty.

Through our academic and LLAB programs which provide cadets practical experience leading, cadets gain a toolbox of skills that help them not only become better students, but most importantly, better leaders. Importantly, the detachment's goal upon leadership is an asset that could be more fully utilized by the wider university student body, given the recent emphasis upon providing opportunities to develop, and recognition for leadership capabilities. Several Aerospace Studies courses are open to all students.

Long-Term Goal

Continue to grow 400th Cadet Wing Scholarship Fund to assist those students with college expenses who do not have an Air Force ROTC scholarship. If this fund could reach endowment levels (~\$25,000), it would be able to provide at least one 'substantial' scholarship each year for a non-scholarship cadet.