

UNIT LEVEL STRATEGIC PLAN
The Department of Military Science
May 2010

Mission: The mission of the Department of Military Science also known as Army Reserve Officer Training Corps (Army ROTC), is to recruit, retain, develop and commission high quality Cadets in order to commission the future Officer leadership of the United States Army. At the same time, the department seeks to advance the academic goals of Michigan Technological University. These missions comfortably overlap, but the College of Sciences and Arts recognizes that the Army ROTC program must be guided by its mission to the U.S. Army and the country at large. 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 Army ROTC program aligns most directly with those of Michigan Tech.

Vision: The centerpiece and core to mission achievement at Michigan Tech is the combined academic and ROTC developmental curriculum and experience. The Department of Military Science will integrate education and training capabilities across all colleges and academic departments to provide a top-tier developmental experience for future officers of the U.S. Army. We will accomplish this by maintaining a dynamic and challenging Officer development curriculum and diverse activities within the ROTC core curriculum, all of this built upon the university's strong undergraduate foundation. In doing so, we will build a program of sufficient reputation to attract diverse, high quality, STEM-focused applicants, and commission talented Officer graduates for the future leadership of the U.S. Army.

Broad and Enduring Programmatic Objectives (Academic year 2010-2011 and beyond)

Given U.S. Army needs for strategic human resource requirements, as well as Michigan Tech's objectives, several objectives endure for the foreseeable future:

- Build academic programs of excellence in the Military Science curriculum through integration of current adult learning advancements, current knowledge, and insights from the operational Army in the classroom and experiential laboratory sessions resulting in a developmental experience capable of producing tomorrow's Scholar-Athlete-Leader for the U.S. Army
- Diversify the Cadet Battalion to more closely replicate the diversity of the U.S. Army, thus advancing simultaneously the university's diversity goals. We will partially accomplish this via recruitment of minority students at key regional fairs targeting minority populations. Critical to our success in this area is locating minority students with the scholarly traits allowing success at Michigan Tech. We will work closely with Michigan Tech's admissions regional managers.
- Fully fund endowed scholarships that allow us to enrich Michigan Tech educational opportunities for Cadets not receiving military scholarship support.

MTU Goal #1 - Attract, retain and support a world-class and diverse faculty, staff and student population

- **Recruit Best Qualified Faculty and Staff:** Our ability to provide a rigorous, challenging and current developmental experience is absolutely dependent on the quality of the Officers and NCOs drawn to our faculty. We cannot teach current and dynamic classroom courses, nor underwrite prudent risk in outdoor lab activities to include cold

weather field training, rappelling and other demanding activities, without competent and seasoned active duty faculty. We will accomplish this by anticipating turnover of key personnel, transitioning our personnel effectively into positions and mentoring them accordingly, and ensuring continued developmental opportunities for them to sustain currency while serving in the department.

- Identify and Recruit the best qualified candidates for admissions:
 - Best Qualified Scholar-Athlete Leaders (SALs): We will seek to strengthen the talent drawn to Michigan Tech via targeted recruiting of those high school students presenting the best combination of SAT/ACT scores, athletic and leadership experience. We will further seek to meet the Army's specific need for additional officers holding STEM degrees, currently 8% of the force, by encouraging students to pursue STEM majors. We define STEM for Army purposes as those degrees categorized as Academic Discipline Mix 3 & 4 categories, and will strongly support students in staying in those fields of study.
 - Diversify the Cadet Battalion to mirror the population of the nation and the Department of the Army. In order to meet the Army's need for a sufficiently diverse Officer Corps, we will seek to meet the following under-represented minority and gender targets:
 - Female 17%
 - Black 13%
 - Hispanic 6%
 - Asian 4%
 - Fully fund the Ben Hall Memorial Endowment Scholarship to a minimum of \$25,000 to ensure the department can provide some level of scholarship support to Cadets who are not able to qualify for other significant funding.

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)
MS-I (Freshmen/1 st or 2 nd Years)	20	23	15	14	14	14	18
MS-II (Sophomores/2 nd or 3 rd Yrs)	16	14	18	11	12	8	14
MS-III (Juniors/3 rd or 4 th Years)	14	18	8	18	12	11	8
MS-IV (Seniors/4 th or 5 th Years)	14	27	7	8	17	12	11
Totals	64	82	48	51	55	45	51
Female	11	7	9	10	8	8	9
Minority	15	1	3	3	3	2	2
Tech Degrees	32	N/A	N/A	N/A	N/A	N/A	N/A

Commissioning Data

	FY06	FY07	FY08	FY09	FY10	FY11 (Projected)
Total	11	9	8	11	12	14
Female	1	2	4	0	0	3
Minority	0	0	1	1	1	0
Tech Degrees	8	3	4	2	8	8

MTU Goal #2 - Innovation and Experiential Learning in a broad based curriculum

Build Programs of Excellence: A large part of our future success rides on our reputation and the legacy of our graduates. We will pursue a reputation built upon credibility and an unwavering emphasis on innovative and creative development for our Cadets.

- We will enhance classroom activities beyond the Cadet Command program of instruction by employing state of the art educational techniques from the Center for Teaching, Learning and Faculty Development as well as experiential techniques proven in the Officer Education System, and do so both in and outside the classroom.
- A significant portion of Army leadership development and education is achieved through experiential learning approaches. Half the weekly contact hours with students are currently taught in an outdoor laboratory setting, performing leader development tasks in a student led small group setting using military

small unit operations (dismounted patrolling) as the environment and an opposition force as the stimulus. We will further integrate developmental opportunities on the Tech Challenge course, rappelling platform, climbing wall, and any other safe and demanding experiential problem solving setting to develop Cadet confidence, judgment to include risk assessment and management skills and leadership competence in the leadership of small groups. These activities are all student planned and executed practicum under the mentorship, approval and safety oversight of the department chair and faculty.

- The goals of the Military Leadership Lab courses are to:

1. Develop confidence, judgment and basic followership skills in first and second year Cadets while instilling in them an appreciation for the role of the most junior servicemen in a functioning organization.
2. Reinforce Army leadership and values as taught in the classroom, instilling Army culture and ethos via immersion in the Cadet battalion environment under mentally and physical circumstances which challenge Cadets to lead, make decisions and demonstrate basic competence at leadership tasks.
3. Apply physical conditioning and strength as developed during morning physical training, for the health, self confidence and stress inoculation of all individuals
4. Foster esprit de corps and cohesion at squad, platoon and battalion level
5. Develop MS-III (Junior) Cadets for their critical evaluation during junior year summer at Leadership Development and Assessment Camp.
6. Develop the evaluation and coaching skills of the MS-IV (Senior) Cadets as they prepare to commission into the U.S. Army, while allowing faculty to verify their final readiness and competence.

- Enhance Army ROTC educational opportunities through continual innovation, striving to connect the total MTU classroom experience to defense and commercial applications in the Midwest. We will accomplish this through opportunities for Cadets to apply classroom learning in a number of environments. Possible opportunities include:
- o Ongoing summer fellowships and research opportunities with Department of Defense activities as well as tours of local engineering firms, Oshkosh Truck's MRAP plant, and Tank Automotive Command's headquarters at Warren, Michigan.
 - o Military history-specific opportunities to include staff ride/battlefield studies of Midwestern battlefields, Gettysburg or the Alamo, or other historically significant military sites.