

Surveying Engineering Technology Newsletter Spring 2017

<http://www.umaine.edu/svt>

The SVT faculty is pleased to share with you this information. We try to get the newsletter to more people/e mail addresses including more e mails of surveying degrees prior to SVT. If you know of someone who is not getting this (and should) please tell Ray.

May Graduates – a big congratulations!!

Sahal Alnuwairan (Saudi Arabia)

Ben Greenwood (ME)

Charles Hildebrant (ME)

Tara Mullen (NH)

Sahal is the first person to take advantage of the international student track in the SVT curriculum (previous international students took the regular track). Ben is the first (of many to come) receiving the dual forestry/SVT degree.

Fundamental of Survey exam results

Charles Hildebrant successfully passed this spring. Tara Mullen previously passed the FS exam.

Undergraduate enrollment

Spring 16 undergraduates (as of April) total 51 students.

20 ME

7 MA

5 CT

5 NH

4 VT

4 NY

3 PA

1 RI

1 NJ

1 Saudi Arabia

22 of these are dual degree either with forestry or forest operations.

Professional Science Masters (PSM) in Surveying Engineering news

Our enrollment is 24 students in the completely on-line program. Note that is approximately 20% of the entire graduation school population of the College of Engineering. Knud has created an advanced survey law class that will be taught for the first time in spring 2018.

Of high importance is the PSM has its second graduate in May – Melissa Soucie of CT. Her final project (a thesis for all practical purposes) is titled “Automation of Feature Extraction for Road Surface Markings”. Congratulation to Melissa for helping continue the history of surveying graduate education at the University of Maine!

Foundation scholarships awarded in April (\$700 each) – Thanks for your support!

Geomatics Society of New England Section Ellsworth V. Stanley

Surveying Engineering Technology (SVT) Scholarship

Noah Bella (PA)

Zachary Fanotto (CT)
Devon Hurley (ME)
Alexander Plescia (CT)

Virginia & Roger Ferguson New England Section Scholarship
James Clasby (NH)
Drew Greenlaw (ME)

Gunther Engineering Surveying Engineering Technology (SVT) Scholarship
Alessandra Reilly (NY)

Brian Kelly Surveying Engineering Technology Scholarship (awarded for first time)
Paul Ruopp (ME)

MALSCE scholarship
Joshua Schneier (ME)

Fritz Petersohn Memorial Surveying (SVT) Scholarship
Jackson Reynolds (ME)

Plisga & Day Scholarship (awarded for first time)
Douglas Robins (NJ)

Andrew J. Shyka Surveying (SVT) Scholarship (\$1000)
Nathan Rice (ME)

Robert P. Titcomb Memorial Scholarship
Connor Hill (VT)

State Society Scholarships awarded – Thanks for your support!

Maine
Charles Hildebrant (ME)
Shawn Mitchell (ME)
Nathan Rice (ME)
Joshua Schneier (ME)

New Hampshire
James Clasby (NH)
Cole Gallant (NH)
Tara Mullen (NH)
Christian Stock (NH)

Massachusetts
Austin Burrows (MA)

National Society of Professional Surveyors Scholarship – winning vs. the entire country is amazing!
NSPS Fellows Scholarship

Tara Mullen (NH)

Scholastic awards

Charles Hildebrant received 2nd place in the outstanding graduating College of Engineering undergraduate category. Some day we have to win this award!

3.5 Achievement Award:

Tara Mullen (NH)

Brian Renfro (VT)

Paul Ruopp (ME)

Presidential Scholar Award:

Tara Mullen (NH)

Brian Renfro (VT)

Capstone Project

Thanks to help from the Town of Orono (Mitchell Stone) and Orono Land Trust (David Thompson) the capstone students individually produced plats and survey reports of 60+ acre Sklar Park which is between I-95 and Main St. in Orono.

Donations

If you feel the need to donate to a scholarship or equipment fund please contact Ray. We are proud that every non-fully funded SVT undergraduate student has received a Foundation scholarship at some point in their academic careers.

On-line SVT – we need your help!

We need to convince administration there is a market on on-line surveying education. If you know of someone who needs surveying education please pass this information on to them.

The University of Maine Surveying Engineering Technology (SVT) invites the surveying community to take any of the following on-line classes Fall 2017 starting on Monday Aug. 28

CET 101 – Plane Surveying (3 cr.)

SVT 121 – AutoCad I (3 cr.)

SVT 110 – Instrumentation and Data Collection (1 cr.)

SVT 322 – Preparing Effective Property Descriptions (1 cr.)

SVT 341 – Advanced Surveying (3 cr.)

SVT 418 - Fundamentals of Surveying exam review (1 cr.)

SVT 437 – Practical GPS (3 cr.)

SVT 501 – Advanced Adjustment Computations (3 cr.)

SVT 511 – Geodetic Aspects of the US Public Land Survey System (3 cr.)

All nine classes can count toward a BS in SVT. The 500+ courses count toward a Professional Science Masters Degree (PSM) in Surveying Engineering. If you wish to take a class or classes please contact Ray Hintz (Raymond.hintz@umit.maine.edu) and I will set it up for you. The lectures, homeworks, and exams exist on an internet site and you have no exact lecture times. All homework and exams have exact due dates. Questions are presented via e mail and phone.

For Maine residents cost is simple – in state tuition. For the rest it is complicated.

- (1) Simply taking a class you will pay out-of-state tuition.
- (2) Applying to U Maine as a SVT undergrad will reduce tuition to the “NEBHE” rate – in state *1.5 if you are from a New England state other than Maine
- (3) Applying to U Maine as a PSM graduate student will reduce tuition the E tuition rate – in state * 1.25 for all states outside of Maine

Applying for admission to a degree program immediately will be approved before classes begin – see <https://go.umaine.edu/apply/> or <https://umaine.edu/graduate/apply/>

For Tuition questions see <http://umaine.edu/bursar/tuition-and-fees/>

All veterans of the US Armed Forces pay in state tuition!

We strongly need you to apply for admission to undergraduate or graduate SVT or PSM degree if you want to take classes! This lets us control the signing up of you for classes. Please apply for admission as soon as possible as last year the University of Maine stopped admissions two months before school began. Once the on-line BS surveying degree is approved all out-of-state students will pay the E tuition rate of 1.25 * in-state tuition.

SVT Crowe Award

The distinguished Francis Crowe award recognizes individuals who have made considerable contributions to Surveying Engineering Technology and the profession.

Congratulations to Michael White of Hampden, ME for his selection to receive the Crowe award in May 2017.



Michael White, Crowe distinguished nominee

Born and raised in Brunswick, Maine, Michael White studied at the University of Maine, receiving both a BS and later an MS in Surveying Engineering. He also worked at the Swiss Federal Institute of Technology, and several surveying and engineering firms. Mr. White's employment experience has focused primarily on regulatory compliance and asset management for railroads and interstate natural gas transmission pipelines, but also gas distribution, electric transmission and distribution, telecommunications, and municipalities. He has taught college level and CED classes in Geographic Information Systems and computer programming, and provides training to pipeline, railroad and municipal customers. Mr. White has strong personal interests in railroads and the industrial history of Maine, is a member of the Baxter State Park Advisory and volunteers at Maine Operation Lifesaver and the Belfast & Moosehead Lake Railroad where he is a Federally-certified railroad locomotive engineer.

Education

BS, Surveying Engineering, University of Maine, 1984

MS, Surveying Engineering, University of Maine, 1987

Achievements

Starting in 1989 at an engineering and surveying firm in Maine, Mr. White developed a novel approach to calculating Title 49 CFR Part 192.5 Class Location Studies. This approach featured precise calculation of population density within a corridor along natural gas transmission pipelines. These population densities in turn determine safety factors for the pipeline and are then used to determine the size, grade, and maximum operating pressure for the pipe. Leading a small development team, this software is now in its third generation, and is used throughout the United States, Canada, and parts of Mexico.

More recently, Mr. White has used these population density techniques to design software for Title 49 Part 172.820 Rail Route Risk Analysis. This regulation applies to railroads that carry certain dangerous hazardous materials and is intended to enhance public safety along their routes. While providing a web-based tool for entering and maintaining population information within corridors along the routes, users also enter other risk factors associated with the safety and security of hauling these hazardous materials. Mr. White worked closely with leaders in the short line and regional railroad industry as well as Federal regulators and industry associations to develop the risk model utilized by the system. This software has been in production for several years and is now the industry standard for single-route railroads.

Professional Activities

Member, Northeast Operating Rules Advisory Committee

Member, American Short Line and Regional Railroad Association Technology Committee

Board of Directors, Maine Operation Lifesaver

Rules Instructor, Belfast & Moosehead Lake Railroad

Former President, Maine GIS User Group

Former Board Member, New England Geospatial Information and Technology Association

Former conference organizing board member for GITA Oil & Gas, NEGITA, MEGUG

Alumni news

Rich Vannozi has re-joined the faculty at The Wentworth Institute of Technology in Boston as an Assistant Professor in the Department of Civil Engineering and Technology. He have also moved back to Plymouth, MA.

Ambrose Gmeiner is now a Vice President at Johnson, Mirmiran & Thompson. www.jmt.com

Gary Jeffress reports that Texas A&M University-Corpus Christi has an online Masters degree in Geospatial Surveying Engineering and a new research based PhD in Geospatial Computing Sciences.

Tim LeSiege ('88) has undertaken the role of Director of the Maine ACE Camp South. ACE stands for Aviation Career Education and is a summer camp for kids. Maine ACE Camp South is based at the Brunswick Executive Airport and will run from August 2 through August 6th. For more information, see www.maineacecamp.org.

Jonathan B. Drew II (2010) continues to work for the USDA Forest Service as the land surveyor covering the Western Oregon Lands Zone, including 5+ million acres of National Forests. Licensed PLS in Oregon (2014) & Maine (2016), CFedS Certification (2015).

David O'Brien reports SurvTech added full aerial surveying from a fixed wing plane, with the addition of a Cessna 310 and a Riegl 1560 LiDAR sensor and RBG camera as of January 2017. They added a Huntsville, Alabama office. This is the office that is managing the aerial surveying. They already mapped thousands of square miles with the sensor, so that line of business is going well. Additionally, SVT graduate Henry Simpkins was one of the crew members that utilized our Hypack Nexus LiDAR UAV to map the Oroville Dam's damaged spillway in 3D at the beginning of this year. Next month Henry is traveling to Panama to map a large river near Colon with multi beam sonar. Lastly, this coming year all three of our UMaine graduates should be sitting for the Florida Surveyor and Mapper exam.

Jeff Johnson (93) spoke at the University of Maine Innovation Center on April 28 "From UMaine to a Global Law Practice: Finding Opportunity in a Changing World". Note Jeff has a law degree from Stanford.

Myles Sykes reports that he spent last summer and fall working for DJ & A out of Missoula, Montana. I got to use some cool equipment (drone, scanners, ATVs), and did a bunch of really cool creek topo jobs in National Forests all over MT, ID, WA, and OR. I left in December and took a road trip all through Canada, and a bunch more states out west like WY and UT, and did a ton of skiing before landing in Boulder, CO. Got a job here working for Flatirons Surveying as an instrument man but sounds like they need party chiefs in construction staking so I'm looking to work my way up!

Faculty News

Knud Hermansen is on phased retirement which means he works in the fall and spends spring in the wintry confines of Florida. The plan is for three more falls of teaching (2017-19). While we wish Knud the best he will be impossible to replace. Knud has built a large amount of on-line lectures for plane surveying, construction surveying, and a new class – SVT 332 Engineering for Surveyors that replace CET 332 while relaxing in Florida.

Ray Hintz spent the previous academic year converting more SVT education to an on-line format. Note Plane Surveying (CET 101) will be offered for the first time on-line this fall.

Carlton Brown is building an on-line boundary law component which will be offered spring 2018. He captures his lectures while teaching boundary law live this semester then will edit them for production in a year. He also contributed to several civil engineering capstone projects with data and education in Carlson Civil. He gets to enjoy the surveyors educators conference in Oregon this summer instead of being the organizer like two years ago.

Steve Adam continues to teach SVT 475 Small Business Management which has become one of the most successful CED courses at the University of Maine. Note a wide variety of students not in SVT also take the course.

Louis Morin teaches the Geographic Information Systems course for SVT students plus many School of Forest Resources students plus several other courses in SFR. The GIS course tends to be one of the most popular in the SVT curriculum.