

**ASEE Zone I Conference Sessions**

Session A	Period	Times	Room	Novel Learning Techniques	Author(s)	Institution	Chair	Co-Chair
USMA-Z1-0135	1a	9:15-9:35	T	Discovery-Based Learning Engineering Classroom	Bahram Nassersharif	URI	Paul Garbarino Bridgeport	Roger Burk
USMA-Z1-0043	1b	9:35-9:55	H	Using Space Travel to Teach Engineering to Liberal Arts Majors	Roger Burk	USMA		
USMA-Z1-0055	1c	9:55-10:15	3 4 1	DEVELOPMENT OF A PROGRAMMABLE LOGIC CONTROLLER EXPERIENTIAL LEARNING PLATFORM	Richard Mindek, Jr.	WNEC		
USMA-Z1-0064	2a	0:30-10:55	T	Programming to Music	Peggy Leonowich Graham (Jocelyn Lewis)	USMA	Imin Kao	
USMA-Z1-0131	2b	0:50-11:15	H	Using video podcast to enhance students' learning experience	Imin Kao	SUNY Stony Brook		
USMA-Z1-0098	2c	1:10-11:30	3 4 1	Motivating Engineering Mathematics Education with Game Analysis Metrics	David Schwartz	RIT		

Session B				Social Issues				
USMA-Z1-0028	4a	3:15-3:35	T H	The Opinion of The Engineering Faculty Members at the Hashemite University in Zarka, Jordan on Teaching Engineering Using Arabic instead of English	Omar Shehadeh Aiman Kuzmar	PSU	Geoffrey Egekwu James Mason University	Dan McCarthy
USMA-Z1-0025	4b	3:35-3:55	3 4	Distance Education: Remote Labs Environment	Bassem Alhalabi M. Khalid Hamza Ali Abu-El Humos	FAU		
USMA-Z1-0138	4c	3:55-4:15	2	Program Assessment and Alignment	Daniel McCarthy Michael Kwinn	USMA		

Session C				Sustainability				
USMA-Z1-0037	3a	2:00-2:20	T	A Preemptive Goal Programming Model for the Sustainability of Growth in Engineering Colleges	Elif Kongar Tarek Sobh	Bridgeport	Christopher Swan	
USMA-Z1-0121	3b	2:20-2:40	H	Beyond Their Technical Capabilities: Providing Student Exposure to Professional, Communication, and Leadership Skills	Christopher Swan Julia Carroll	Tufts		
USMA-Z1-0042	3c	2:40-3:00	3 4 8	Increasing the Participation of Women in the Engineering and Technical Services Industry	Elif Kongar Paul Kontogiorgis Nancy Russo Tarek Sobh	Bridgeport		

Session D				Materials				
USMA-Z1-0120	1a	9:15-9:35	T	Effect of Defects on Mechanical Properties of Composites: Undergraduate Research on Materials	Mir Aliqullah	SPSU	Dean M. Aslam Rich Gash	
USMA-Z1-0027	1b	9:35-9:55	H	Nanotechnology Learning Modules Using Technology Assisted Science, Engineering and Mathematics	Dean M. Aslam Aixia Shao	MSU		
USMA-Z1-0141	1c	9:55-10:15	3 4 4	Getting Students to Think Green: Incorporating Green Building Rating Systems into Undergraduate Reinforced Concrete Education	Rich Gash Dave Fedroff	USMA		

Session E				Global				
USMA-Z1-0091	1a	9:15-9:35	T	MQP in China: Extension of WPI Practice on Project based Engineering Education	Yiming Rong	WPI	Richard Stanley	John Rogers
USMA-Z1-0084	1b	9:35-9:55	H	Interactive Web Based Animation Software: An Efficient Way to Increase the Engineering Student's Fundamental Understanding of Particle Kinematics and Kinetics	Richard Stanley	Kettering		
USMA-Z1-0100	1c	9:55-10:15	3 4 2	Web-Based Collaboration Tool in Engineering Design Courses	Junichi Kanai	RPI		
USMA-Z1-0036	3a	2:00-2:20	T	Transforming a Technology Management Master's Degree Curriculum Into a Successful Inter-Disciplinary Program for the 21st Century Needs of Global Organizations	Gad Selig	Bridgeport	Gad Selig	
USMA-Z1-0010	3b	2:20-2:40	H	Teaching Engineering Design with a focus on the developing world	Beena Sukumaran Joshua Bonzella Kevin McGarvey Heather Klein Thomas Bryant	Rowan		
USMA-Z1-0108	3c	2:40-3:00	3 4 2	A Model for a Bi-lingual Curriculum	Abdelrahman Rabie Rahman Haleem	JMU		

Session F				Electrical Engineering				
USMA-Z1-0022	2a	0:30-10:55	T	A NEW AUTHENTICATION MECHANISM TO ENHANCE IEEE 802.16 AUTHENTICATION VULNERABILITIES	Abdelshakour Abuzneid Abdelrahman Elleithy Alaa Abuzaghleh	Bridgeport	Mustafa Guvench	
USMA-Z1-0136	2b	0:50-11:15	H	Design, Simulation and Testing of MOSIS Fabricated CMOS Operational Amplifiers for Class Projects in an Analog I.C. Design Course	Mustafa Guvench	Maine		
USMA-Z1-0103	2c	1:10-11:30	3 4 4	DISCUSSION ON HIGH VOLTAGES AND THEIR SUCCESSFUL INTRODUCTION IN TO THE ENGINEERING CLASS ROOM USING REAL LIFE ACCIDENT CASES	Navarun Gupta Buket Barkana Sarosh Patel Lawrence Hmurcik	Bridgeport		
USMA-Z1-0068	3a	2:00-2:20	T	Using Available Wireless / Wired Network Infrastructure for Public Safety and Emergency Early Response	Khaled Elleithy Abdelshakour Abuzneid Mohannad Abuzneid	Bridgeport	Kanti Prasad	
USMA-Z1-0143	3b	2:20-2:40	H	Adding Automatic Control to the Senior Laboratory Experience	Harry Knickle Don Gray	URI		
USMA-Z1-0004	3c	2:40-3:00	3 4 4	Imparting consummate instructions in microelectronics engineering and VLSI technology at the University of Massachusetts at Lowell	Kanti Prasad	UML		
USMA-Z1-0115	4a	3:15-3:35	T	Case-based Learning Methods with 3D Interactive Multimedia for Millennial Generation Engineering Students	Paul Ranky	NJIT	John Adams	
USMA-Z1-0083	4b	3:35-3:55	H	INCLUSION OF RFID IN A BSEE CURRICULUM	John Adams Charles Kochakian	Merrimack		
USMA-Z1-0089	4c	3:55-4:15	3 4 4	Student Development of Class Notes Using a Wiki as an Alternative to a Single Course Textbook	Vicki May	Dartmouth		

Session G			Team-Based Learning/Design					
USMA-Z1-0077	1a	9:15-9:35	T H 3 4 5	Multidisciplinary High Energy Laser Weapon System Student Design Study	John Hartke Robert Kewley Gregory Kilby Gregory Schwarz Gunnar Tamm	USMA	Aaron Bradshaw	Greg Kilby
USMA-Z1-0075	1b	9:35-9:55		Project-Based Team Learning: Teaching Decision Analysis When the Data are Sparse	Robin Burk	USMA		
USMA-Z1-0117	1c	9:55-10:15		Development of a Civil Engineering Design Course Based On Reflective Action	Aaron Bradshaw Gary McCloskey Franklin Miguel	Merrimack		

Session H								
USMA-Z1-0059	2a	0:30-10:5	T H 3 4 2		Corinna Fleischmann Nathan Podoll Sharon Zelmanowitz	USGCA	Robert M. Brooks	Brian Novoselich
USMA-Z1-0105	2b	0:50-11:1		The Effect of Incorporation of Empowerment Projects on Student Performance in a Civil Engineering Course	Robert M. Brooks Soumitra Basu Shriram Pillapakkam Kurosh Darvish Keerthi V. Takkalappelli	Temple		
USMA-Z1-0118	2c	1:10-11:3		Teaching for Success; Molding Course Syllabi to Support Student Capstone Design Work.	Brian Novoselich Justin Highley	USMA		

Session I			CAD/Computational					
USMA-Z1-0002	1a	9:15-9:35	T H 3 4 8	Assessing the Effectiveness of a Mechanical Engineering Computer-Aided Design Course	Roy McGrann	Binghamton	Roy McGrann	Mark Visosky
USMA-Z1-0001	1b	9:35-9:55		Finite Element Method - a Tool for Learning Runway Design	Robert M. Brooks Parsaoran Hutapea Iyad Obeid Li Bai Keerthi V. Takkalappelli	Temple		
USMA-Z1-0056	1c	9:55-10:15		Comparison of Shear Stress Acting in the Sockets of Typical Mobile and Immobile Ankle Prostheses Using Finite Element Analysis (FEA)	Ha Vo Stephanie Rossman Zsaez Flucker Ramachandran Radharamanan	Mercer		

Session J			Classroom/Textbooks					
USMA-Z1-0104	2a	0:30-10:5	T H 3 4 8	The Challenge Of Preaching To No Choir: How Mindset Can Make Or Break A Course	Ashraf Ghaly	Union	Marie-Pierre Hugué	
USMA-Z1-0099	2c	0:50-11:1		From Chalk to Electrons – Blended Engineering Education	Frank Wright Marie-Pierre Hugué	RPI		
USMA-Z1-0113	2b	1:10-11:3		From Electrons to Neutrons – Blended Engineering Education	Marie-Pierre Hugué Tom Haley Sehnaz Baltaci-Goktalay	RPI		

Session K			Student Assessment					
USMA-Z1-0035	3a	2:00-2:20	T H 3 4 1	The Use of Clicker Technology to Evaluate Short- and Long-Term Concept Retention	David-Michael Roux Adam Czekanski	USMA	Karinna Vernaza	David-Michael Roux
USMA-Z1-0073	3b	2:20-2:40		Promoting Active Learning and Creativity in the Strength of Materials Course	Karinna Vernaza	Gannon		
USMA-Z1-0080	3c	2:40-3:00		Computer Based Testing to Enhance Effective Teaching of International M.S. Students in Teaching-oriented Schools	Saikat Ray	Bridgeport		
USMA-Z1-0119	4a	3:15-3:35	T H 3 4 1	Strictly Proper Scoring Rules in an Absolute Grading Environment – Preliminary Findings	Robert Dees Kennon Gilliam Michael Kwinn	USMA	Diana Schwerha	Elizabeth Bristow
USMA-Z1-0086	4b	3:35-3:55		Assessing Impact of New Teaching Methods by Predicting Student Performance	Jakob Bruhl Elizabeth Bristow J. Ledlie Klosky	USMA		
USMA-Z1-0126	4c	3:55-4:15		Second Life as a Pedagogical Tool for Improving Statistics Homework Sessions	Diana Schwerha Chang Liu Sertac Ozercan Tripura Vadlamani Lev Neiman	Ohio		

Session L			K-12					
USMA-Z1-0053	1a	9:15-9:35	T H 4 4 2	Early and Continuous Exposure to Engineering as a Profession: Career Imprinting in Grades PK-12	Hudson Jackson Evelyn A. Ellis	USCGA	Philip Brach	
USMA-Z1-0111	1b	9:35-9:55		Keeping the STEM Student Pipeline Flowing: An Innovative Partnership Between a K-12 School System and an Institution of Higher Learning	Linda Riley Charles Thomas	Roger Williams		
USMA-Z1-0008	1c	9:55-10:15		Engineering Faculty Involvement in K-12 Education An Historical Perspective	Philip Brach Ahmet Zeytinci	ATT		

Session M			Introduction to Engineering					
USMA-Z1-0003	2a	0:30-10:5	T H 3 4 5	Racing to Learn Engineering	Peter Tkacik	UNCC	Peter Tkacik	
USMA-Z1-0094	2b	0:50-11:1		Technology courses to attract non technology students	Anthony Manno Kamal Shahrabi	Kean		
USMA-Z1-0012	2c	1:10-11:3		A Ball-on-Beam System with an Embedded Controller	David Evanko Arend Dorsett Chiu Choi	UNF		
USMA-Z1-0107	3a	2:00-2:20	T H 3 4 5	The First Course	Gregory Parnell Michael Kwinn	USMA	Keith Sheppard	Gregory Parnell
USMA-Z1-0116	3b	2:20-2:40		Promoting Systems Thinking in Engineering and Pre-Engineering Students	Rashmi Jain Keith Sheppard Elisabeth McGrath Bernard Gallois	Stevens		
USMA-Z1-0016	3c	2:40-3:00		A Comparison of Student Performance in an Online with traditional Based Entry Level Engineering Course	Ismail Orabi	New Haven		

Session N			Robots/Robotics					
USMA-Z1-0110	3a	2:00-2:20	T H 3	Undergraduate Mechatronics Course Design Project	Ryan Ebel Donald Abbott-McCune David Chang	USMA	Shih-Liang (Sid) Wang	Donald Abbott-McCune
USMA-Z1-0052	3b	2:20-2:40		Free Body Diagrams of Gear Trains	Shih-Liang (Sid) Wang	NCAT		

USMA-Z1-0026	3c	2:40-3:00	4 7	Innovative Engineering Education Using Programmable Lego Robotic VD Graaf Generators	Dean M. Aslam Zongliang Cao Cyrus Rostamzadeh	MSU		
USMA-Z1-0069	4a	3:15-3:35	H	CAD/CAM and Robotics Applications in Laboratory-Learning Environment	Ramachandran Radharamanan Ha Vo	Mercer	Wei Cao	
USMA-Z1-0142	4b	3:35-3:55	3 4	Formation and Cooperation for SWARMed Intelligent Robots	Wei Cao Yanging Gao Jason Mace	West VA		

**Session O**

**First Year/Freshman Engineering**

USMA-Z1-0021	1a	9:15-9:35	T H	Accelerating Engagement of First-Year Students in Academics: Use of Ideas from Quality Literature	David Gray	Messiah	David Gray	David Palazzo
USMA-Z1-0088	1b	9:35-9:55	3 4	TEACHING NEW ENGINEERING STUDENTS ABOUT THE DISCIPLINES: A DISCIPLINARY OR MULTI-DISCIPLINARY APPROACH?	Jennifer Zirnheld Adam Halstead	Buffalo		
USMA-Z1-0140	1c	9:55-10:15	7	Video Analysis: The Next Physics Laboratory?	David Palazzo Chad Schools	USMA		
USMA-Z1-0024	2a	0:30-10:5	T H	Cognitive Learning in Introductory College Science Education	Joe Manous Eileen Kowalski	USMA	Joseph Robert Yost	Eileen Kowalski
USMA-Z1-0032	2b	0:50-11:1	3 4	Introduction to Engineering: A Freshman Year Multidisciplinary Engineering Course and Competition	Joseph Robert Yost Randy Weinstein	Villanova		
USMA-Z1-0112	2c	1:10-11:3	7	Great Problems Seminars: A New First-Year Foundation at WPI	Arthur Heinricher Brian Savilonis David Spanagel Robert Traver Kristin Wobbb	WPI		

**Session P**

**Industry**

USMA-Z1-0066	4a	3:15-3:35	T H	The Evolution of Technical Communication at Lukens Steel, 1810-1925	Carol Siri Johnson	NJIT	Neal Lewis	
USMA-Z1-0033	4b	3:35-3:55	3	The Engineer as a Professor: Bringing Experience to the Engineering Classroom	Neal Lewis	Bridgeport		
USMA-Z1-0085	4c	3:55-4:15	4 5	Helping Connecticut Aerospace Parts Manufacturers Become Lean	M. Ali Montazer	New Haven		

**Session Q**

**Chemical Engineering**

USMA-Z1-0062	3a	2:00-2:20	T H	Interdisciplinary Learning for Chemical Engineering Students from Organic Chemistry Synthesis Lab to Reactor Design to Separation	Matt Armstrong Rich Comitz Russ Lachance Joe Sloop Andy Biaglow	USMA	Barrie Jackson	Matt Armstrong
USMA-Z1-0079	3b	2:20-2:40	4 4	The role of Process Safety Management in a Chemical Engineering undergraduate program	Barrie Jackson	Queens U		
USMA-Z1-0102	3c	2:40-3:00	2	To Dam Or Not To Dam: An Insight Into The Environmental Politics Of Rivers	Ashraf Ghaly Megan Ferry	Union		

**Session R**

**Service to the Profession**

USMA-Z1-0060	2a	0:30-10:5	T H	Service Learning in Environmental Engineering at the United States Coast Guard Academy	Sharon Zelmanowitz	USCGA	Jeremy (Zheng) Li Bridgeport	
USMA-Z1-0038	2b	0:50-11:1	4	Wonder, Discovery and Intuition in Elementary Mathematics	Andrew Grossfield	BFN		
USMA-Z1-0132	2c	1:10-11:3	4 4 2	How to improve Student Retention Rates in Science and Technology	Ali Setoodehnia Anthony Manno Kamal Shahrabi	Kean		