

## College of Engineering and Computer Science

### AEE - Aerospace Engineering

<b>AEE 427</b>	<b>Aircraft Performance&amp;Dynamics</b> — Prereq: MAE 341.	18110	SEC	M001	MW F	02:15PM-03:35PM 12:45PM-01:40PM	Green	4.0	
<b>AEE 446</b>	<b>Propulsion</b> — Prereq: AEE 343.	18402	SEC	M001	TTh	03:30PM-04:50PM	Akih Kumgeh	3.0	
		18456	REC	M002	Th	05:00PM-06:20PM	Akih Kumgeh		
<b>AEE 471</b>	<b>Desgn/Anlys Aerosp Strctr</b> — Prereq: ECS 325.	18112	SEC	M001	MW	10:35AM-12:35PM	Dalir	4.0	

### BEN - Bioengineering

<b>BEN 231</b>	<b>Mass &amp; Energy Balances</b> — Crosslisted with CEN 231.	18474	SEC	M001	TTh	12:30PM-01:50PM	Martin	3.0	
<b>BEN 301</b>	<b>Biological Princpls for Engrs</b> — Prereq: CHE 275 and MAT 397 and ECS 104.	18470	SEC	M001	MWF	11:40AM-12:35PM	Ren	4.0	
		18626	LAB	M002	F	02:15PM-05:00PM	Ren		
<b>BEN 333</b>	<b>Fluid Transport</b> — Prereq: MAT 397 and (PHY 212 or 216). Crosslisted with CEN 333.	18472	SEC	M001	MWF	10:35AM-11:30AM	Sangani	3.0	Jr or Sr standing only.
<b>BEN 400</b>	<b>Selected Topics</b>	18776	SEC	M001	TTh	03:30PM-04:50PM	Soman	3.0	Class Topic: Bio-Manufacturing. Biomanufacturing introduces the students to plethora of manufacturing technologies which have been applied to process biomaterials in order to engineer heterogeneous tissue models, medical therapeutic products and in-vitro drug-testing platforms. The class consists of lectures on various manufacturing/processes such as casting, molding, machining, soft/photo-lithography, microfluidics, stereolithography, electrospinning, and laser/light-photocrosslinking. Successful completion of the course will provide the student with the benefits, limitations, and applications of different biomanufacturing strategies.
		18778	SEC	M002	TTh	11:00AM-12:20PM	Chen	3.0	Class Topic: Envir Risk Assess & Toxicology. meets with CIE 554.
		19008	SEC	M005	TTh	12:30PM-01:50PM	Esch	3.0	Class Topic: Nanobiotechnology.
<b>BEN 458</b>	<b>Biomedical Imaging</b> — Double numbered with BEN 658.	18688	SEC	M001	TTh	05:00PM-06:20PM	Staff	3.0	
<b>BEN 465</b>	<b>Biomechanics</b> — Prereq: ECS 221 and MAT 485 and BEN 364. Double numbered with BEN 665.	18560	SEC	M001	TTh	02:00PM-03:20PM	Henderson	3.0	
<b>BEN 481</b>	<b>Bioinstrumentation</b> — Prereq: ELE 231 and 232.	18566	SEC	M001	WF	12:45PM-02:05PM	Zachman	3.0	BEN Srs Only.
<b>BEN 485</b>	<b>Bioengineering Laboratory</b> — Coreq: BEN 465 and 481. <i>Register for one Lab M002 or M003, Section M001 will auto-enroll.</i>	18564	SEC	M001	M	12:45PM-01:40PM	Zachman	4.0	BEN Srs Only.
		18568	LAB	M002	M	02:15PM-05:05PM	Zachman		
		18574	LAB	M003	W	02:15PM-05:05PM	Zachman		
<b>BEN 490</b>	<b>Independent Study</b>	26299	SEC	M001		TBA	Staff	1.0	6.0 Department Consent Required. Proposal required.
<b>BEN 600</b>	<b>Selected Topics</b>	18758	SEC	M002	M	05:15PM-08:05PM	Quinn	3.0	Class Topic: Advanced Bioengineering Design. Department Consent Required. BEN MS Students Only.
		18770	SEC	M003	TTh	03:30PM-04:50PM	Soman	3.0	Class Topic: Bio-Manufacturing. BEN Grad Students Only Biomanufacturing introduces the students to plethora of manufacturing technologies which have been applied to process biomaterials in order to engineer heterogeneous tissue models, medical therapeutic products and in-vitro drug-testing platforms. The class consists of lectures on various manufacturing/processes such as casting, molding, machining, soft/photo-lithography, microfluidics, stereolithography, electrospinning, and laser/light-photocrosslinking. Successful completion of the course will provide the student with the benefits, limitations, and applications of different biomanufacturing strategies.
		26379	SEC	M004		TBA	Chen	1.0	6.0 Class Topic: Envir Risk Assess & Toxicology.
		19006	SEC	M005	TTh	12:30PM-01:50PM	Esch	3.0	Class Topic: Nanobiotechnology.
<b>BEN 601</b>	<b>BMCE Seminar</b> — Crosslisted with CEN 601.	18368	SEC	M001	F	12:45PM-02:15PM	Nangia Sureshkumar	0.0	
<b>BEN 602</b>	<b>Ethical Issues in Engineering</b> — Crosslisted with CEN 602.	18766	SEC	M001	MW	12:45PM-02:05PM	Radcliffe	1.0	3.0
<b>BEN 614</b>	<b>Methods in Neuroscience</b> — Crosslisted with BIO 625, CSD 754, NEU 614, PSY 779.	26928	SEC	M001		TBA	Hewett	0.0	3.0 Meets with BIO625/NEU614/CSD754/PSY779.
<b>BEN 635</b>	<b>Physical Cell Biology</b> — Crosslisted with BIO 635, CEN 635, CHE 635, PHY 635.	15314	SEC	M001	MW	02:15PM-03:35PM	Forstner	3.0	BEN Grad Students Only.
<b>BEN 658</b>	<b>Biomedical Imaging</b> — Double numbered with BEN 458.	18690	SEC	M001	TTh	05:00PM-06:20PM	Ogden	3.0	
<b>BEN 665</b>	<b>Biomechanics</b> — Prereq: ECS 221, MAT 485, BEN 664. Double numbered with BEN 465.	18562	SEC	M001	TTh	02:00PM-03:20PM	Henderson	3.0	BEN Grad Students Only.
<b>BEN 690</b>	<b>Independent Study</b>	26296	SEC	M001		TBA	Staff	1.0	6.0 Department Consent Required. Proposal required.
<b>BEN 768</b>	<b>Surfaces of Biomaterials</b>	18960	SEC	M001	TTh	09:30AM-10:50AM	Gilbert	3.0	
<b>BEN 997</b>	<b>Thesis for the M.S. Degree</b>	18288	SEC	M001		TBA	Staff	1.0	6.0

### CEN - Chemical Engineering

<b>CEN 231</b>	<b>Mass &amp; Energy Balances</b> — Crosslisted with BEN 231.	18114	SEC	M001	TTh	12:30PM-01:50PM	Cadwell	3.0	Sophomore or Junior standing Evening Exams.
<b>CEN 333</b>	<b>Fluid Transport</b> — Prereq: MAT 397 and (PHY 212 or 216). Crosslisted with BEN 333.	18116	SEC	M001	MWF	10:35AM-11:30AM	Sangani	3.0	Junior or Senior Standing.
<b>CEN 353</b>	<b>Cen Thermodynamics II</b> — Prereq: CEN 252.	18118	SEC	M001	TTh	02:00PM-03:20PM	Nangia	3.0	Undergraduate students only.
<b>CEN 400</b>	<b>Selected Topics</b>	18904	SEC	M001	TTh	03:30PM-04:50PM	Soman	3.0	Class Topic: Bio-Manufacturing.
		18812	SEC	M002	TTh	11:00AM-12:20PM	Chen	3.0	Class Topic: Envir Risk Assess & Toxicology. Meets with CIE 554.
		18902	SEC	M003	TTh	02:00PM-03:20PM	Hosein	3.0	Class Topic: Materials for Energy System.
		18966	SEC	M004		TBA	Bond	3.0	Class Topic: Service Energy & Sustainabil. Instructor Consent Required.
<b>CEN 412</b>	<b>Chemical Engr Lab II</b> — Prereq: CEN 341.	18278	SEC	M001	M	12:45PM-04:15PM	Cadwell	2.0	
		18496	SEC	M002	W	12:45PM-04:15PM	Cadwell	2.0	

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Subject & Cat Nbr	Course Title		Component		Meeting Days & Times	Instructor	Min Max		Comments
	Class Nbr	Type	Nbr	Units			Units	Units	
<b>CEN 461</b>	<b>Env Chem &amp; Analysis — Crosslisted with CIE 471, CIE 671. Double numbered with CEN 661.</b>								
	18378	SEC	M001	MW	10:35AM-12:35PM	Johnson		3.0	
<b>CEN 490</b>	<b>Independent Study</b>								
	26298	SEC	M001		TBA	Staff	1.0	6.0	Department Consent Required. Proposal required.
<b>CEN 542</b>	<b>Heat &amp; Mass Transfer Oper — Prereq: CEN 341.</b>								
	18122	SEC	M001	TTh	09:30AM-10:50AM	Tavlarides	3.0		Undergraduates only.
<b>CEN 573</b>	<b>Prn&amp;Des/Air Pollutn Cntrl</b>								
	18912	SEC	M001	TTh	05:00PM-06:20PM	Santanam	3.0		
<b>CEN 587</b>	<b>Chemical Reaction Egr — Prereq: CEN 341 and CHE 356.</b>								
	18124	SEC	M001	MWF	09:30AM-10:25AM	Bond	3.0		
<b>CEN 600</b>	<b>Selected Topics</b>								
	18768	SEC	M001	TTh	03:30PM-04:50PM	Soman	3.0		Class Topic: Bio-Manufacturing. CEN Grad Students Only.
	18772	SEC	M002	W	05:15PM-08:00PM	Santanam	3.0		Class Topic: Advanced Chemical Engr Design. Department Consent Required. CEN MS students only.
	18774	SEC	M003	TTh	11:00AM-12:20PM	Chen	3.0		Class Topic: Envir Risk Assess & Toxicology.
	18900	SEC	M004	TTh	02:00PM-03:20PM	Hoseini	3.0		Class Topic: Materials for Energy Systems. Instructor Consent Required. CEN Grad Students Only.
	18994	SEC	M005	MW	05:15PM-06:35PM	Sanqani	3.0		Class Topic: Modeling & Simulation Chem Proc. CEN Grad Students Only.
<b>CEN 601</b>	<b>BMCE Seminar — Crosslisted with BEN 601.</b>								
	18816	SEC	M001	F	12:45PM-02:15PM	Nangia Sureshkumar	0.0		
<b>CEN 602</b>	<b>Ethical Issues in Engineering — Crosslisted with BEN 602.</b>								
	18818	SEC	M001	MW	12:45PM-02:05PM	Radcliffe	1.0	3.0	
<b>CEN 635</b>	<b>Physical Cell Biology — Crosslisted with BEN 635, BIO 635, CHE 635, PHY 635.</b>								
	15315	SEC	M001	MW	02:15PM-03:35PM	Forstner	3.0		CEN grad students only.
<b>CEN 643</b>	<b>Fluid Dynamics — Prereq: MAE 341 or CEN 333. Crosslisted with MAE 643.</b>								
	<i>Meets with MAE 643</i>								
	18944	SEC	M001	TTh	05:00PM-06:20PM	Lewalle	3.0		
<b>CEN 661</b>	<b>Env Chem &amp; Analysis — Crosslisted with CIE 471, CIE 671. Double numbered with CEN 461.</b>								
	18380	SEC	M001	MW	05:15PM-07:15PM	Johnson	3.0		
<b>CEN 671</b>	<b>Chemical Engineering Meth I</b>								
	18342	SEC	M001	MW	03:45PM-05:05PM	Sureshkumar	3.0		
<b>CEN 690</b>	<b>Independent Study</b>								
	26297	SEC	M001		TBA	Staff	1.0	6.0	Department Consent Required. Proposal required.
<b>CEN 997</b>	<b>Masters Thesis</b>								
	18126	SEC	M001		TBA	Staff	1.0	6.0	
<b>CIE - Civil Engineering</b>									
<b>CIE 273</b>	<b>Intro to Geomatics &amp; BIM — Prereq: MAT 295; Coreq: MAT 296.</b>								
	<i>Register for one Lab M003 - M005; Section M001 will auto-enroll.</i>								
	18878	SEC	M001	MWF	09:30AM-10:25AM	Salman	3.0		
	18880	LAB	M003	W	12:45PM-03:30PM	Salman			
	18882	LAB	M004	F	12:45PM-03:30PM	Salman			
	18884	LAB	M005	M	12:45PM-03:30PM	Salman			
<b>CIE 327</b>	<b>Prin of Fluid Mechanics — Prereq: MAT 397 and ECS 221.</b>								
	<i>Register for one Recitation M002 - M005; Section M001 will auto-enroll.</i>								
	18540	SEC	M001	TTh	11:00AM-12:20PM	Staff	4.0		
	18542	REC	M002	T	03:30PM-04:50PM	Staff			
	18544	REC	M003	Th	03:30PM-04:50PM	Staff			
	18546	REC	M004	T	12:30PM-01:50PM	Staff			
	18886	REC	M005	Th	12:30PM-01:50PM	Staff			
<b>CIE 331</b>	<b>Analys/Structr &amp; Mat'ls — Prereq: ECS 325.</b>								
	<i>Register for Recitation M002; Section M001 will auto-enroll.</i>								
	18128	SEC	M001	MWF	10:35AM-11:30AM	Lui	3.0		
	18290	REC	M002	W	11:40AM-12:35PM	Lui			
				W	11:40AM-12:35PM				
				W	11:40AM-12:35PM				
<b>CIE 337</b>	<b>Intro to Geotechnical Engrng — Prereq: ECS 325.</b>								
	<i>Register for one CIE Lab; M002, M003, M006, M008; Section M001 will auto-enroll.</i>								
	18130	SEC	M001	TTh	09:30AM-10:50AM	Bhatia	4.0		civil/environmental engr students only.
	18214	LAB	M002	M	12:45PM-03:15PM	Bhatia			civil/environmental engr students only.
	18216	LAB	M003	W	12:45PM-03:15PM	Bhatia			civil/environmental engr students only.
	18218	LAB	M004	W	03:45PM-06:15PM	Bhatia			ESF students only.
	18422	LAB	M005	F	12:45PM-03:15PM	Bhatia			ESF students only.
	18464	LAB	M006	M	03:45PM-06:15PM	Bhatia			civil/environmental engr students only.
	<i>Register for one ESF Lab; M004, M005; Section M007 will auto-enroll.</i>								
	18484	SEC	M007	TTh	08:00AM-09:20AM	Bhatia	4.0		ESF students only.
	18686	LAB	M008	T	05:00PM-07:30PM	Bhatia			civil/environmental engr students only.
<b>CIE 341</b>	<b>Intro. to Environmental Engrng — Prereq: CIE 274.</b>								
	<i>Register for Recitation M002 or M003, Section M001 will auto-enroll.</i>								
	18132	SEC	M001	TTh	02:00PM-03:20PM	Todorova	3.0		
	18360	REC	M002	F	12:45PM-01:40PM	Todorova			
	27301	REC	M003	F	11:40AM-12:35PM	Todorova			
<b>CIE 400</b>	<b>Selected Topics</b>								
	26880	SEC	M001	MWF	09:30AM-10:25AM	Todorova	3.0		Class Topic: Urban Stormwater Management. Meets with CIE600, M001.
	18466	SEC	M003		TBA	Lui	1.0		Class Topic: Field Learning Experience. CIE Seniors Only.
	27266	SEC	M005	TTh	09:30AM-10:50AM	Steinberg	3.0		Class Topic: Urban Infrastructure. Meets with CIE600, M005.
<b>CIE 401</b>	<b>Construction Eng &amp; Project Mgt — Double numbered with CIE 601.</b>								
	18892	SEC	M001	TTh	03:30PM-04:50PM	Salem	3.0		
<b>CIE 442</b>	<b>Treatment Proc. in Env. Eng. — Prereq: (CIE 327 or MAE 341) and CIE 341. Double numbered with CIE 642.</b>								
	<i>Register for one Lab M002 - M004; Section M001 will auto-enroll.</i>								
	18502	SEC	M001	TTh	11:00AM-12:20PM	Zeng	4.0		
	18504	LAB	M002	T	12:30PM-03:15PM	Zeng			
	18506	LAB	M003	Th	12:30PM-03:15PM	Zeng			
	18538	LAB	M004	T	02:00PM-04:45PM	Zeng			
<b>CIE 443</b>	<b>Transportation Engineering — Double numbered with CIE 643.</b>								
	18134	SEC	M001	MW	02:15PM-03:35PM	Salman	3.0		
<b>CIE 457</b>	<b>Biogeochemistry — Prereq: CHE 106 and 107. Double numbered with CIE 657.</b>								
	18404	SEC	M001	MW	02:15PM-03:35PM	Driscoll Jr	3.0		
<b>CIE 463</b>	<b>Intro to Sustainable Engr — Double numbered with CIE 663.</b>								
	18896	SEC	M001	MW	12:45PM-02:05PM	Davidson	3.0		Instructor Consent Required.
<b>CIE 471</b>	<b>Env Chem &amp; Analysis — Crosslisted with CEN 461, CEN 661. Double numbered with CIE 671.</b>								
	18374	SEC	M001	MW	10:35AM-12:35PM	Johnson	3.0		

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Subject & Cat Nbr	Course Title		Component		Meeting Days & Times	Instructor	Min Max Units	Comments
	Class Nbr	Type	Nbr					
<b>CIE 478</b>	<b>Rehab of Civil Infrastructure — Prereq: CIE 332 and ECS 325. Double numbered with CIE 678.</b>							
	18356	SEC	M001	MW	03:45PM-05:05PM	Aboutaha	3.0	
<b>CIE 548</b>	<b>Engr Econ &amp; Tech Valuation — Prereq: MAT 296. Crosslisted with MAE 548.</b>							
	18712	SEC	M001	Th	03:30PM-06:15PM	Khalifa	3.0	
<b>CIE 554</b>	<b>Prin Envrn Toxicology — Prereq: (BIO 121 and 123) or (CHE 106 and 107 and 275) or (CHE 109 and 129).</b>							
	19020	SEC	M001	TTh	11:00AM-12:20PM	Chen	3.0	Meets with BEN 400/600, M002/M004; CEN 400/600, M002/M003.
<b>CIE 571</b>	<b>Water Quality Modeling — Prereq: MAT 296 and CIE 341.</b>							
	27137	SEC	M001		TBA	Staff	3.0	
<b>CIE 588</b>	<b>Principles of Wind Turbines — Prereq: MAE 341. Crosslisted with MAE 588.</b>							
	18762	SEC	M001	TTh	05:00PM-06:20PM	Murthy	3.0	
<b>CIE 600</b>	<b>Selected Topics</b>							
	26881	SEC	M001	MWF	09:30AM-10:25AM	Todorova	3.0	Class Topic: Urban Stormwater Management. Meets with CIE400, M001.
	27270	SEC	M005	TTh	09:30AM-10:50AM	Steinberg	3.0	Class Topic: Urban Infrastructure. Meets with CIE 400, M005.
<b>CIE 601</b>	<b>Construction Eng &amp; Project Mgt — Double numbered with CIE 401.</b>							
	18894	SEC	M001	TTh	03:30PM-04:50PM	Salem	3.0	
<b>CIE 632</b>	<b>Structural Analysis II — Prereq: CIE 631.</b>							
	26763	SEC	M001	MW	12:45PM-02:05PM	Lui	3.0	
<b>CIE 633</b>	<b>Finite Element Analysis</b>							
	18650	SEC	M001	TTh	12:30PM-01:50PM	Ataei	3.0	
<b>CIE 637</b>	<b>Adv Soil Mech Fndtns I</b>							
	18420	SEC	M001	TTh	05:00PM-06:20PM	Negusseay	3.0	
<b>CIE 642</b>	<b>Treatment Proc. in Env. Eng. — Double numbered with CIE 442.</b>							
	<i>Register for Lab M003; Section M001 will auto-enroll.</i>							
	18508	SEC	M001	TTh	11:00AM-12:20PM	Zeng	4.0	
	18510	LAB	M003	Th	02:00PM-04:45PM	Zeng		
<b>CIE 643</b>	<b>Transportation Engineering — Double numbered with CIE 443.</b>							
	18756	SEC	M001	MW	02:15PM-03:35PM	Salman	3.0	
<b>CIE 657</b>	<b>Biogeochemistry — Double numbered with CIE 457.</b>							
	18418	SEC	M001	MW	02:15PM-03:35PM	Driscoll Jr	3.0	
<b>CIE 660</b>	<b>Seminar Civil Engineering</b>							
	26823	SEC	M001		TBA	Staff	0.0	
<b>CIE 663</b>	<b>Intro to Sustainable Engr — Double numbered with CIE 463.</b>							
	18898	SEC	M001	MW	12:45PM-02:05PM	Davidson	3.0	
<b>CIE 670</b>	<b>Experience Credit</b>							
	26873	SEC	M001		TBA	Staff	1.0	6.0 Department Consent Required. Proposal required.
<b>CIE 671</b>	<b>Env Chem &amp; Analysis — Crosslisted with CEN 461, CEN 661. Double numbered with CIE 471.</b>							
	18376	SEC	M001	MW	05:15PM-07:15PM	Johnson	3.0	
<b>CIE 677</b>	<b>Design of Structural Systems</b>							
	18548	SEC	M001	MW	05:15PM-06:35PM	Aboutaha	3.0	
<b>CIE 678</b>	<b>Rehab of Civil Infrastructure — Prereq: ECS 325, CIE 332. Double numbered with CIE 478.</b>							
	18358	SEC	M001	MW	03:45PM-05:05PM	Aboutaha	3.0	
<b>CIE 690</b>	<b>Independent Study</b>							
	26874	SEC	M001		TBA	Staff	1.0	6.0 Department Consent Required. Proposal required.
<b>CIE 700</b>	<b>Selected Topics</b>							
	18710	SEC	M001	T	03:30PM-04:50PM	Driscoll Jr	1.0	Class Topic: Water Seminar. Meets with EAR 600, M006.
<b>CIE 995</b>	<b>Master's Exit Paper</b>							
	18764	SEC	M001		TBA	Buchanan	0.0	
<b>CIE 996</b>	<b>Master's Project</b>							
	18136	SEC	M001		TBA	Staff	3.0	
<b>CIE 997</b>	<b>Masters Thesis</b>							
	18138	SEC	M001		TBA	Staff	0.0	6.0
<b>CIS - Computer &amp; Info Science</b>								
<b>CIS 321</b>	<b>Intro to Probablty/Statis — Prereq: MAT 295.</b>							
	18968	SEC	M001	TTh	08:00AM-09:20AM	Staff	4.0	
<b>CIS 351</b>	<b>Data Structures — Prereq: CIS 252.</b>							
	<i>Register for Lab M002 Or M003; Section M001 will auto-enroll.</i>							
	18142	SEC	M001	MW	12:45PM-02:05PM	Royer	4.0	
	18220	LAB	M002	T	12:30PM-01:25PM	Royer		
	18222	LAB	M003	T	11:00AM-11:55AM	Royer		
	<i>Register for Lab M005 or M006; Section M004 will auto-enroll.</i>							
	18786	SEC	M004	MW	03:45PM-05:05PM	Royer	4.0	
	18788	LAB	M005	T	11:00AM-11:55AM	Royer		
	18814	LAB	M006	T	02:00PM-02:55PM	Royer		
	18936	SEC	M007	MW	02:15PM-03:35PM	Staff	4.0	Register for Lab M008 or M009; Section M007 will auto-enroll.
	18938	LAB	M008	T	03:30PM-04:25PM	Staff		
	18940	LAB	M009	T	05:00PM-05:55PM	Staff		
<b>CIS 375</b>	<b>Intro to Discrete Mathematics</b>							
	<i>Register for Recitation M002 or M003 and Section M001 will auto-enroll.</i>							
	18298	SEC	M001	TTh	02:00PM-03:20PM	Older	3.0	
	18340	REC	M002	Th	11:00AM-11:55AM	Older		
	18462	REC	M003	W	10:35AM-11:30AM	Older		
	<i>Register for Recitation M005 or M006 and Section M004 will auto-enroll.</i>							
	18780	SEC	M004	TTh	11:00AM-12:20PM	Older	3.0	
	18782	REC	M005	W	02:15PM-03:10PM	Older		
	18784	REC	M006	W	03:45PM-04:40PM	Older		
	18930	SEC	M007	TTh	12:30PM-01:50PM	Mehrotra	3.0	Register for Recitation M008 or M009 and Section M007 will auto-enroll.
	18932	REC	M008	W	09:30AM-10:25AM	Mehrotra		
	18934	REC	M009	W	11:40AM-12:35PM	Mehrotra		
<b>CIS 386</b>	<b>Princ. of Computer Sys Design — Prereq: ECS 102 and CIS 351.</b>							
	18820	SEC	M001	TTh	08:00AM-09:20AM	Staff	3.0	
<b>CIS 400</b>	<b>Selected Topics</b>							
	18620	SEC	M002	W	09:30AM-12:15PM	Biocca	3.0	Class Topic: Human-Computer Interaction. Meets with CIS 600 M002 and COM/TRF 400/600.
	18840	SEC	M008	MW	02:15PM-03:35PM	Chin	3.0	Class Topic: Certified Security by Design. Instructor Consent Required.
<b>CIS 428</b>	<b>Introduction to Cryptography — Prereq: CIS 477 or MAT 534 or 541.</b>							
	18806	SEC	M001	TTh	09:30AM-10:50AM	Blair	3.0	
<b>CIS 444</b>	<b>Mobile Application Programming — Prereq: CIS 351 or CSE 382. Double numbered with CIS 651.</b>							
	18832	SEC	M001	TTh	02:00PM-03:20PM	Staff	3.0	
<b>CIS 453</b>	<b>Software Spec. and Design — Prereq: CIS 351 or CSE 382.</b>							
	18212	SEC	M001		TBA	Yu	3.0	

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Subject & Cat Nbr	Course Title		Component		Meeting Days & Times	Instructor	Min Units	Max Units	Comments
	Class Nbr	Type	Nbr						
<b>CIS 467</b>	<b>Intro/Artfcl. Intelligence — Prereq: CIS 275 and 321 and (CIS 351 or CSE 382). Double numbered with CIS 667.</b>								
	<i>Enroll in Lab M002; Section M001 will auto-enroll.</i>								
	18300	SEC	M001	TTh	11:00AM-12:20PM	Lee	3.0		
	18302	LAB	M002	F	10:35AM-11:30AM	Lee			
<b>CIS 468</b>	<b>Natural Language Processing — Crosslisted with IST 664. Double numbered with CIS 668.</b>								
	18704	SEC	M001	MW	12:45PM-02:05PM	McCracken	3.0		Meets with CIS 648; IST 664 and IST 400.
<b>CIS 477</b>	<b>Intro/Analysis of Algorithms — Prereq: CIS 275 and 351.</b>								
	18498	SEC	M001	TTh	09:30AM-10:50AM	Lee	3.0		Enroll in Recitation M002; Section M001 will auto-enroll.
	18500	REC	M002	W	10:35AM-11:30AM	Lee			
<b>CIS 486</b>	<b>Design Operating Systems — Prereq: (CIS 341 and 342 and 351) or (CSE 381 and 382).</b>								
	18518	SEC	M001	TTh	12:30PM-01:50PM	Oh	3.0		
				F	11:40AM-01:40PM				
<b>CIS 487</b>	<b>Access Control, Security&amp;Trust — Prereq: CIS 275.</b>								
	18836	SEC	M001	MW	12:45PM-02:05PM	Chin	3.0		
<b>CIS 543</b>	<b>Control of Robots — Crosslisted with ELE 516.</b>								
	18366	SEC	M001	MW	02:15PM-03:35PM	Tetlev	3.0		
<b>CIS 551</b>	<b>Modern Programming in Java</b>								
	<i>Enroll in Recitation Section M003, Section M001 will auto-enroll.</i>								
	18426	SEC	M001	TTh	05:00PM-06:20PM	Irwin	3.0		
	18516	REC	M003	F	02:15PM-03:35PM	Irwin			
<b>CIS 554</b>	<b>Obj Orientd Progrmng C++ — Prereq: ECS 102.</b>								
	18488	SEC	M001	W	05:15PM-08:00PM	Waclawski	3.0		
<b>CIS 600</b>	<b>Selected Topics</b>								
	18622	SEC	M002	W	09:30AM-12:15PM	Biocca	3.0		Class Topic: Human-Computer Interaction. Meets with CIS 400 M002 and COM/TRF 400/600.
	19042	SEC	M801		TBA	Staff	3.0		Class Topic: Software Engineering. O2 = Online Asynchronous Residency. International students need to check with SCIS before enrolling in an online course.
<b>CIS 607</b>	<b>Mathmat. Basis for Computing</b>								
	18332	SEC	M001	TTh	11:00AM-12:20PM	Blair	3.0		
<b>CIS 628</b>	<b>Introduction to Cryptography — Prereq: (CIS 477 or 675) or (MAT 534 or 541).</b>								
	18808	SEC	M001	TTh	09:30AM-10:50AM	Blair	3.0		
<b>CIS 651</b>	<b>Mobile Application Programming — Double numbered with CIS 444.</b>								
	18834	SEC	M001	TTh	02:00PM-03:20PM	Staff	3.0		
<b>CIS 655</b>	<b>Computer Architecture — Prereq: CIS 341.</b>								
	18810	SEC	M001	TTh	08:00AM-09:20AM	Tang	3.0		
<b>CIS 657</b>	<b>Prncpls Operating Systems — Prereq: CIS/CSE 486 or equivalent.</b>								
	<i>Register for Lab M002 or M003; Section M001 will auto-enroll.</i>								
	18306	SEC	M001	TTh	09:30AM-10:50AM	Markowski	3.0		
	18570	LAB	M002	Th	02:00PM-04:50PM	Markowski			
	18572	LAB	M003	Th	05:00PM-08:00PM	Markowski			
<b>CIS 667</b>	<b>Intro/Artfcl. Intelligence — Double numbered with CIS 467.</b>								
	<i>Enroll in Lab M002; Section M001 will auto-enroll.</i>								
	18308	SEC	M001	TTh	11:00AM-12:20PM	Lee	3.0		
	18310	LAB	M002	F	10:35AM-11:30AM	Lee			
<b>CIS 668</b>	<b>Natural Language Processing — Crosslisted with IST 664. Double numbered with CIS 468.</b>								
	18706	SEC	M001	MW	12:45PM-02:05PM	McCracken	3.0		
<b>CIS 675</b>	<b>Desgn&amp;Analys of Algorithms — Prereq: CIS/CSE 607.</b>								
	18312	SEC	M001	MW	05:15PM-06:35PM	Soundarajan	3.0		
<b>CIS 787</b>	<b>Analytical Data Mining — Prereq: CIS 675, ELE 606, CSE 607.</b>								
	18790	SEC	M001	MW	03:45PM-05:05PM	Zafarani	3.0		
<b>CIS 997</b>	<b>Masters Thesis</b>								
	18280	SEC	M001		TBA	Staff	1.0	6.0	Department Consent Required.
<b>CPS - Computational Science</b>									
<b>CPS 100</b>	<b>Selected Topics</b>								
	27395	SEC	M001		TBA	Staff	3.0		Class Topic: Python Programming/Beginners.
<b>CPS 181</b>	<b>Introduction to Computing</b>								
	18416	SEC	M001	MW	02:15PM-03:35PM	Wang	3.0		Includes lab. For non-CE, CIS majors.
<b>CPS 196</b>	<b>Intro to Computer Programming</b>								
	18140	SEC	M001	MW	03:45PM-05:05PM	Staff	3.0		Includes lab. For non-CE, CIS majors.
<b>CPS 500</b>	<b>Selected Topics</b>								
	27389	SEC	M001		TBA	Staff	3.0		Class Topic: Python Programming.
	27390	SEC	M002		TBA	Staff	1.0		Class Topic: Programming in R.
<b>CSE - Computer Engineering</b>									
<b>CSE 283</b>	<b>Object-Oriented Design — Prereq: ECS 102.</b>								
	<i>Register for Recitation M002; Section M001 will auto-enroll.</i>								
	18336	SEC	M001	MW	12:45PM-02:05PM	Chen	3.0		
	18648	REC	M002	F	11:40AM-12:35PM	Chen			
<b>CSE 381</b>	<b>Computer Architecture — Prereq: CSE 261.</b>								
	<i>Register for Recitation M002; Section M001 will auto-enroll.</i>								
	18520	SEC	M001	TTh	09:30AM-10:50AM	Qiu	3.0		
	18652	REC	M002	W	11:40AM-12:35PM	Qiu			
<b>CSE 397</b>	<b>FPGA &amp; Microcontroller Des Lab — Prereq: CSE 261 and ELE 231.</b>								
	18144	SEC	M001	MW	03:45PM-06:30PM	Marcv	3.0		CSE Enar only.
<b>CSE 464</b>	<b>Intro to Vlsi Design — Prereq: CSE 261. Crosslisted with ELE 464.</b>								
	<i>Register for Lab M003, choose Recitation M002 and Lecture M001.</i>								
	18146	SEC	M001	MW	10:35AM-11:30AM	Qiu	3.0		
	18276	REC	M002	F	11:40AM-12:35PM	Qiu			
<b>CSE 484</b>	<b>Intro Cmptr&amp;Network Security — Prereq: CIS 486 or CSE 486 or CSE 384.</b>								
	18478	SEC	M001	TTh	12:30PM-01:50PM	Du	3.0		Enroll in M002 or M003 and M001 will Auto-Enroll.
	18926	LAB	M002	M	09:30AM-10:25AM	Du			
	18928	LAB	M003	M	11:40AM-12:35PM	Du			
<b>CSE 489</b>	<b>Web System Arch/Prog — Prereq: CIS 351 or CSE 382.</b>								
	18910	SEC	M001	MW	02:15PM-03:35PM	Yu	3.0		
<b>CSE 491</b>	<b>Senior Design Project I — Prereq: CSE 398.</b>								
	18556	SEC	M001	TTh	11:00AM-12:20PM	Marcy	1.0		
<b>CSE 561</b>	<b>Digital Machine Design — Prereq: CSE 261.</b>								
	18680	SEC	M002	TTh	12:30PM-01:50PM	Ercanli	3.0		Grad students only.
<b>CSE 581</b>	<b>Intro D/Base Mngmt Syst. — Prereq: CSE 382 or CIS 351.</b>								
	18656	SEC	M001	F	11:40AM-12:35PM	Staff	3.0		
				F	12:45PM-02:25PM				
<b>CSE 643</b>	<b>Computer Security</b>								
	18482	SEC	M001	MW	02:15PM-03:35PM	Du	3.0		Meets with CIS 483 and CSE 484.

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Subject & Cat Nbr	Course Title		Meeting Days & Times	Instructor	Min Max Units	Comments
	Class Nbr	Component Type Nbr				
<b>CSE 661</b>	<b>Advncd Cmptr Architect</b>					
	18316 SEC M001	TTh	08:00AM-09:20AM	Tanq	3.0	
<b>CSE 664</b>	<b>VLSI Design Methods — Crosslisted with ELE 664.</b>					
	18318 SEC M001	MW	02:15PM-03:35PM	Wang	3.0	
<b>CSE 674</b>	<b>Advanced Data Struct and Alg</b>					
	18828 SEC M001	MW	06:45PM-08:05PM	Lee	3.0	
<b>CSE 681</b>	<b>Software Modeling &amp; Analysis</b>					
	18524 SEC M001	MW	08:00AM-09:20AM	Fawcett	3.0	
	18530 SEC M002	MW	03:45PM-05:05PM	Fawcett	3.0	
<b>CSE 682</b>	<b>Software Engineering</b>					
	18320 SEC M001	M	05:15PM-08:00PM	Roueche	3.0	Meets with CIS 600/M004.
<b>CSE 776</b>	<b>Design Patterns — Prereq: CSE 681 and 687.</b>					
	18526 SEC M001	W	09:30AM-12:15PM	Fawcett	3.0	
	18576 SEC M002	M	09:30AM-12:15PM	Fawcett	3.0	
<b>CSE 997</b>	<b>Masters Thesis</b>					
	18210 SEC M001	TBA		Staff	1.0	6.0 Department Consent Required.

**ECS - Engineering & Computer Science**

ECS 100	Selected Topics						
	18948	SEC M001	M	02:15PM-03:35PM	Colosi Hasenwinkel Mack TA	1.0	Class Topic: 1st Yr Engineering Experience. Instructor Consent Required.
	18950	SEC M002	M	03:45PM-05:05PM	Colosi Hasenwinkel Mack TA	1.0	Class Topic: 1st Yr Engineering Experience. Instructor Consent Required.
	18952	SEC M003	T	11:00AM-12:20PM	Colosi Hasenwinkel Mack TA	1.0	Class Topic: 1st Yr Engineering Experience. Instructor Consent Required.
	18954	SEC M004	W	02:15PM-03:35PM	Colosi Hasenwinkel Mack TA	1.0	Class Topic: 1st Yr Engineering Experience. Instructor Consent Required.
	18956	SEC M005	W	03:45PM-05:05PM	Colosi Hasenwinkel Mack TA	1.0	Class Topic: 1st Yr Engineering Experience. Instructor Consent Required.
	18958	SEC M006	Th	11:00AM-12:20PM	Colosi Hasenwinkel Mack TA	1.0	Class Topic: 1st Yr Engineering Experience. Instructor Consent Required.
<b>ECS 101</b>	<b>Introduction to Engr/Cmptr Sci</b>						
	18148	SEC M002	TTh	09:30AM-10:50AM	Dannenhoffer	3.0	Aerospace Engr. Students Only.
	18150	SEC M003	TTh	09:30AM-10:50AM	Carranti	3.0	Mechanical Engr. Students Only Register for M003/lab M017, M024, M025 will auto enroll.
	18152	SEC M005	TTh	09:30AM-10:50AM	Martin	3.0	Chemical Engr. Students Only.
	18154	SEC M006	TTh	09:30AM-10:50AM	Dannenhoffer	3.0	Civil & Environmental Engr Students Only.
	18156	SEC M010	TTh	09:30AM-10:50AM	Graham	3.0	Electrical & Computer Engineering; Electrical Engineering Students Only.
	18158	SEC M011	TTh	09:30AM-10:50AM	Oh	3.0	Computer Science Students Only.
	18160	SEC M012	TTh	03:45PM-05:05PM	F		
	18160	SEC M012	TTh	09:30AM-10:50AM	Ercanli	3.0	Electrical & Computer Engineering; Computer Engineering Students Only.
	27138	SEC M013		TBA	Oh	3.0	
	18206	SEC M014	TTh	12:30PM-01:50PM	Plumley	3.0	Undeclared Engineering students only.
	18292	SEC M016	TTh	11:00AM-12:20PM	Dannenhoffer	3.0	Aerospace Students Only.
	18468	LAB M017	W	02:15PM-03:35PM	Carranti		M017 is a non-enrollment lab for Mechanical students.
	18338	SEC M018	TTh	03:30PM-04:50PM	Henderson	3.0	Bioengineering Students Only.
	18392	SEC M019	TTh	11:00AM-12:20PM	Dannenhoffer	3.0	Civil & Environmental Engr Students Only.
	18536	SEC M023	TTh	02:00PM-03:20PM	Plumley	3.0	Civil & Environmental Engr Students Only.
	18732	LAB M024	W	12:45PM-02:05PM	Carranti		M024 is a non-enrollment lab for Mechanical students.
	18734	LAB M025	W	03:45PM-05:05PM	Carranti		M024 is a non-enrollment lab for Mechanical students.
<b>ECS 102</b>	<b>Introduction to Computing</b>						
	18162	SEC M001	MW	03:45PM-05:35PM	Baruch	3.0	CE and EE undergrads - Lab.
	18730	SEC M002	TTh	03:30PM-05:20PM	Yu	3.0	CE and EE undergrads - Lab.
	18830	SEC M003	TTh	05:00PM-06:50PM	Roueche	3.0	ECS undergrads - Lab.
	18942	SEC M004	MW	12:45PM-02:35PM	Baruch	3.0	EECS undergrads - Lab.
<b>ECS 114</b>	<b>AEW for Pre-Calculus — Coreq: MAT 194.</b>						
	18578	SEC M001	TTh	05:00PM-05:55PM	Pynn	1.0	
	19032	SEC M002	TTh	12:30PM-01:25PM	Pynn	1.0	
	18580	SEC M005	MW	11:40AM-12:35PM	Pynn	1.0	
	18582	SEC M009	WF	12:45PM-01:40PM	Pynn	1.0	
	18584	SEC M010	M	04:20PM-05:15PM	Pynn	1.0	
			W	04:20PM-05:15PM	Staff		
<b>ECS 115</b>	<b>AEW for Calculus I — Coreq: MAT 295.</b>						
	19034	SEC M001	MW	02:15PM-03:10PM	Pynn	1.0	
	18586	SEC M002	M	02:15PM-03:10PM	Pynn	1.0	
			W	02:15PM-03:10PM	Staff		
	18588	SEC M003	TTh	11:00AM-11:55AM	Pynn	1.0	
	18590	SEC M004	MW	03:45PM-04:40PM	Pynn	1.0	
	18592	SEC M005	TTh	11:00AM-11:55AM	Pynn	1.0	
	18848	SEC M006	WF	12:45PM-01:40PM	Pynn	1.0	
	18850	SEC M007	MW	12:45PM-01:40PM	Pynn	1.0	
	18852	SEC M008	MW	02:15PM-03:10PM	Pynn	1.0	
	18594	SEC M009	TTh	02:00PM-02:55PM	Pynn	1.0	
	18856	SEC M010	TTh	12:30PM-01:25PM	Pynn	1.0	
	18860	SEC M012	MW	03:45PM-04:40PM	Pynn	1.0	
	18596	SEC M015	MW	11:40AM-12:35PM	Pynn	1.0	
	19052	SEC M016	TTh	12:30PM-01:25PM	Pynn	1.0	
	19056	SEC M020	M	11:40AM-01:30PM	Pynn	1.0	
	18668	SEC M021	M	06:00PM-07:50PM	Pynn	1.0	
	19054	SEC M022	Th	05:30PM-07:20PM	Pynn	1.0	
	18682	SEC M023	F	02:15PM-04:05PM	Pynn	1.0	
	18736	SEC M025	F	11:40AM-01:30PM	Pynn	1.0	
	18740	SEC M026	Th	11:00AM-12:50PM	Pynn	1.0	
	18744	SEC M027	Th	05:30PM-07:20PM	Pynn	1.0	
	18858	SEC M028	F	02:15PM-04:05PM	Pynn	1.0	
	18862	SEC M029	Th	01:30PM-03:20PM	Pynn	1.0	
	19036	SEC M030	WF	02:15PM-03:10PM	Pynn	1.0	

College of Engineering and Computer Science

Subject & Cat Nbr	Course Title		Meeting Days & Times	Instructor	Min Max Units	Comments
	Class Nbr	Component Type Nbr				
<b>ECS 116</b>	<b>AEW for Calculus II — Coreq: MAT 296.</b>					
	18598	SEC M001	Th 03:30PM-05:20PM	Pynn	1.0	
	18600	SEC M002	W 06:45PM-08:35PM	Pynn	1.0	
	18602	SEC M004	T 04:10PM-06:00PM	Pynn	1.0	
	18604	SEC M006	W 05:45PM-07:35PM	Pynn	1.0	
	18632	SEC M008	M 04:45PM-06:35PM	Pynn	1.0	
	18722	SEC M009	W 03:45PM-05:35PM	Pynn	1.0	
	18726	SEC M011	T 05:30PM-07:20PM	Pynn	1.0	
	19048	SEC M012	F 02:15PM-04:05PM	Pynn	1.0	
<b>ECS 117</b>	<b>AEW for Calculus III — Coreq: MAT 397.</b>					
	18606	SEC M001	F 02:15PM-04:05PM	Pynn	1.0	Rec Mat 397 M001 students.
	18608	SEC M002	M 06:45PM-08:35PM	Pynn	1.0	Rec Mat 397 M00 and M006 students.
	18610	SEC M003	Th 05:00PM-06:50PM	Pynn	1.0	Rec Mat 397 M003 or M005 students.
	18612	SEC M004	T 06:30PM-08:20PM	Pynn	1.0	Rec Mat 397 M004 students.
	18614	SEC M005	M 03:45PM-05:35PM	Pynn	1.0	Rec Mat 397 M005 or M003 students.
	18616	SEC M006	W 03:45PM-05:35PM	Pynn	1.0	Rec Mat 397 M006 or M002 students.
	18618	SEC M007	M 12:45PM-02:35PM	Pynn	1.0	Rec Mat 397 M007 students.
	18634	SEC M008	T 11:00AM-12:50PM	Pynn	1.0	Rec Mat 397 M008 students.
	18678	SEC M009	M 02:15PM-04:05PM	Pynn	1.0	Rec Mat 397 M009 students.
	18724	SEC M010	F 02:15PM-04:05PM	Pynn	1.0	Rec Mat 397 M010 students.
	18742	SEC M011	Th 09:00AM-10:50AM	Pynn	1.0	Rec Mat 397 M011 students.
<b>ECS 122</b>	<b>AEW for Intro to Computing — Coreq: ECS 102.</b>					
	18796	SEC M001	T 05:30PM-07:20PM	Pynn	1.0	
	18798	SEC M002	W 06:30PM-08:20PM	Pynn	1.0	
<b>ECS 201</b>	<b>AEW for Statics — Coreq: ECS 221.</b>					
	18854	SEC M001	W 06:40PM-08:30PM	Pynn	1.0	Students in ECS 221 LEC M001 or M016 ONLY.
	18670	SEC M002	Th 06:30PM-08:20PM	Pynn	1.0	Students in ECS 221 LEC M001 or M016 ONLY.
	18630	SEC M003	M 03:45PM-05:35PM	Pynn	1.0	Students in ECS 221 LEC M001 or M016 ONLY.
	18628	SEC M005	T 06:10PM-08:00PM	Pynn	1.0	Students in ECS 221 LEC M001 or M016 ONLY.
	18494	SEC M008	W 03:45PM-05:35PM	Pynn	1.0	Students in ECS 221 LEC M001 or M016 ONLY.
	18458	SEC M009	M 01:50PM-03:40PM	Pynn	1.0	Students in ECS 221 LEC M001 or M016 ONLY.
	18676	SEC M010	T 02:00PM-03:50PM	Pynn	1.0	Students in ECS 221 LEC M008 ONLY.
	18460	SEC M011	M 06:00PM-07:50PM	Pynn	1.0	Students in ECS 221 LEC M008 ONLY.
	18728	SEC M012	Th 06:10PM-08:00PM	Pynn	1.0	Students in ECS 221 LEC M008 ONLY.
	18672	SEC M020	M 06:45PM-08:35PM	Pynn	1.0	Students in ECS 221 LEC M013 ONLY.
	18674	SEC M021	Th 06:30PM-08:20PM	Pynn	1.0	Students in ECS 221 LEC M013 ONLY.
<b>ECS 204</b>	<b>Math Prog for Engineers</b>					
	18692	SEC M001	W 10:35AM-11:30AM	Staff	1.0	
<b>ECS 206</b>	<b>AEW for Mass &amp; Energy — Coreq: CEN 231.</b>					
	18800	SEC M001	M 04:00PM-05:50PM	Pynn	1.0	
	18802	SEC M002	W 07:00PM-08:50PM	Pynn	1.0	
<b>ECS 221</b>	<b>Statics — Prereq: PHY 211 or 215; Coreq: MAT 296.</b>					
	<i>Register for one recitation M002-M005, M011-M012; Main Section M001 will auto-enroll.</i>					
	18164	SEC M001	MWF 11:40AM-12:35PM	Levy	3.0	MAE students ONLY for M001-M005; M011-M012 NON-MAE students ONLY for M006-M010; M013-M015.
	18224	REC M002	F 09:30AM-10:25AM	Levy		MAE students ONLY for M001-M005; M011-M012.
	18226	REC M003	F 10:35AM-11:30AM	Roppo		MAE students ONLY for M001-M005; M011-M012.
	18228	REC M004	F 12:45PM-01:40PM	Roppo		MAE students ONLY for M001-M005; M011-M012.
	18232	REC M005	F 08:25AM-09:20AM	Levy		MAE students ONLY for M001-M005; M011-M012.
	18230	REC M006	M 11:40AM-12:35PM	Dannenhoffer		NON-MAE students ONLY for M006-M009.
	<i>Register for recitation M006 or M009; Main Section M008 will auto-enroll.</i>					
	18348	SEC M008	MWF 10:35AM-11:30AM	Dannenhoffer	3.0	NON-MAE students ONLY for M006-M009.
	18390	REC M009	M 12:45PM-01:40PM	Dannenhoffer		NON-MAE students ONLY for M006-M009.
	18490	REC M011	F 09:30AM-10:25AM	Roppo		MAE Students Only M001-M005; M011-M012.
	18492	REC M012	F 10:35AM-11:30AM	Levy		MAE Students ONLY M001-M005; M011-M012.
	<i>Register for recitation M014 or M015, main section M013 will auto-enroll.</i>					
	18550	SEC M013	MWF 11:40AM-12:35PM	Mac Namara	3.0	CIE students ONLY for M013-M015.
	18552	REC M014	M 10:35AM-11:30AM	Mac Namara		CIE students ONLY for M013-M015.
	18554	REC M015	W 10:35AM-11:30AM	Mac Namara		CIE students ONLY for M013-M015.
	18992	SEC M016	MWF 11:40AM-12:35PM	Roppo	3.0	
<b>ECS 300</b>	<b>Selected Topics</b>					
	27295	SEC M001	TBA	Povinelli	3.0	Class Topic: Intro to Entrepreneurial Engr.
<b>ECS 325</b>	<b>Mechanics of Solids — Prereq: ECS 221; Coreq: MAT 397.</b>					
	<i>Register for recitation M002; section M001 will auto-enroll.</i>					
	18370	SEC M001	TTh 09:30AM-10:50AM	Staff	4.0	
			W 03:45PM-04:40PM	Roppo		
	18372	REC M002	M 11:40AM-12:35PM	Roppo		
<b>ECS 326</b>	<b>Engr Materials/Prop/Processing</b>					
	18344	SEC M001	TTh 03:30PM-04:50PM	Gilbert	3.0	
	18346	REC M002	T 12:30PM-01:50PM	Gilbert		
	18400	REC M003	Th 12:30PM-01:50PM	Gilbert		
	18454	REC M004	Th 02:00PM-03:20PM	Gilbert		
	18522	REC M005	T 02:00PM-03:20PM	Gilbert		
	27289	SEC M006	TTh 03:30PM-04:50PM	Blum	3.0	
	27291	REC M007	M 08:00AM-09:20AM	Blum		
	27292	REC M008	W 05:15PM-06:35PM	Blum		
	27293	REC M009	Th 02:00PM-03:20PM	Blum		
<b>ECS 370</b>	<b>Professional Practice</b>					
	18168	SEC M001	TBA	Davis	0.0	Proposal required.
<b>ECS 375</b>	<b>AEW Facilitator Forum</b>					
	18720	SEC M003	M 09:30AM-10:25AM	Pynn	1.0	
	19004	SEC M004	T 05:00PM-05:55PM	Pynn	1.0	
	19002	SEC M005	W 09:30AM-10:25AM	Pynn	1.0	
<b>ECS 391</b>	<b>Legal Aspects of Ecs</b>					
	18166	SEC M001	TTh 05:00PM-06:20PM	Burstyn	3.0	
<b>ECS 392</b>	<b>Ethical Aspects of ECS</b>					
	18204	SEC M001	MW 08:00AM-09:20AM	Radcliffe	3.0	
<b>ECS 500</b>	<b>Selected Topics</b>					
	19022	SEC M001	Th 03:30PM-06:15PM	Schmidt	3.0	Class Topic: Data Ctr: Instruc Dsgn Ergy.
	19038	SEC M002	TTh 02:00PM-03:20PM	Povinelli	3.0	Class Topic: Intro to Entrepreneurial Engr.
<b>ECS 526</b>	<b>Statistics for Engineers — Prereq: ECS 525 or MAT 521.</b>					
	18386	SEC M001	T 06:30PM-09:15PM	Moon	3.0	
<b>ECS 600</b>	<b>Selected Topics</b>					
	27296	SEC M001	TBA	Povinelli	3.0	Class Topic: Entrepreneurial Engr Topics.

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Subject & Cat Nbr	Course Title		Component Type	Meeting Days & Times	Instructor	Min Max Units	Comments
	Class Nbr	Nbr					
<b>ECS 651</b>	<b>Strategic Mgmt &amp; Nat Environ — Prereq: ECS/BUA 650. Crosslisted with BUA 651.</b>						
	18528	SEC M001	MFSatSun	02:30PM-09:00PM	Moss Russo	3.0	Instructor Consent Required.
				TBA			
<b>ECS 691</b>	<b>Fundamentals of Research</b>						
	18394	SEC M001	W	11:40AM-12:35PM	Phoha	1.0	
<b>ELE - Electrical Engineering</b>							
<b>ELE 231</b>	<b>EE Fundamentals I — Prereq: MAT 295.</b>						
	<i>Register for one Recitation M002 - M007; Section M001 will auto-enroll.</i>						
	18170	SEC M001	MWF	09:30AM-10:25AM	Marcy	3.0	
	18234	REC M002	M	03:45PM-04:40PM	Marcy		Meets with ELE 231 M009.
	18236	REC M003	T	11:00AM-11:55AM	Marcy		Meets with ELE 231 M010.
	18238	REC M004	T	02:00PM-02:55PM	Marcy		Meets with ELE 231 M011.
	18240	REC M005	W	10:35AM-11:30AM	Marcy		
	18242	REC M006	W	03:45PM-04:40PM	Marcy		Meets with ELE 231 M012.
	18432	REC M007	Th	12:30PM-01:25PM	Marcy		Meets with ELE 231 M013.
	<i>Register for one Recitation M009 - M013; Section M008 will auto-enroll.</i>						
	18434	SEC M008	MWF	10:35AM-11:30AM	Marcy	3.0	
	18436	REC M009	M	03:45PM-04:40PM	Marcy		Meets with ELE 231 M002.
	18438	REC M010	T	11:00AM-11:55AM	Marcy		Meets with ELE 231 M003.
	18440	REC M011	T	02:00PM-02:55PM	Marcy		Meets with ELE 231 M004.
	18442	REC M012	W	03:45PM-04:40PM	Marcy		Meets with ELE 231 M006.
	18444	REC M013	Th	12:30PM-01:25PM	Marcy		Meets with ELE 231 M007.
<b>ELE 232</b>	<b>EE Fundamentals II — Prereq: ELE 231.</b>						
	<i>Register for Recitation M002 or M003; Section M001 will auto-enroll.</i>						
	18208	SEC M001	MW	02:15PM-03:35PM	Velipasalar	3.0	
	18274	REC M002	T	06:30PM-07:25PM	Velipasalar		
	18714	REC M003	T	02:00PM-02:45PM	Velipasalar		
<b>ELE 291</b>	<b>EE Laboratory I — Coreq: ELE 231.</b>						
	18172	SEC M001	M	12:45PM-03:35PM	Tetley	1.0	
	18174	SEC M002	T	03:30PM-06:20PM	Tetley	1.0	
	18176	SEC M003	W	12:45PM-03:35PM	Tetley	1.0	
	18178	SEC M004	Th	03:30PM-06:20PM	Tetley	1.0	
	18180	SEC M005	M	06:45PM-09:35PM	Tetley	1.0	
	18296	SEC M006	F	12:45PM-03:35PM	Tetley	1.0	
	18362	SEC M007	W	06:45PM-09:35PM	Tetley	1.0	
	18364	SEC M008	Th	06:30PM-09:20PM	Tetley	1.0	
<b>ELE 292</b>	<b>Electrical Lab II — Prereq: ELE 291; Coreq: ELE 232.</b>						
	18282	SEC M001	F	03:45PM-06:35PM	Tetley	1.0	
<b>ELE 324</b>	<b>Electromagnetics I — Prereq: MAT 397 and (PHY 212 or 216). Crosslisted with PHY 424.</b>						
	<i>Register for Recitation M002 or M003; Section M001 will auto-enroll.</i>						
	18182	SEC M001	TTh	09:30AM-10:50AM	Lee	3.0	
	18244	REC M002	M	11:40AM-12:35PM	Lee		
	18284	REC M003	M	03:45PM-04:40PM	Lee		
<b>ELE 331</b>	<b>Digital Circuits/Systems — Prereq: ELE 232.</b>						
	<i>Register for one Recitation M002 - M003; Section M001 will auto-enroll.</i>						
	18184	SEC M001	TTh	12:30PM-01:50PM	Graham	3.0	
	18246	REC M002	W	09:30AM-10:25AM	Graham		
	18248	REC M003	W	03:45PM-04:40PM	Graham		
<b>ELE 351</b>	<b>System &amp; Signal Analysis — Prereq: ELE 232 and MAT 296.</b>						
	<i>Register for one Recitation M002 - M004; Section M001 will auto-enroll.</i>						
	18186	SEC M001	TTh	02:00PM-03:20PM	Chen	3.0	
	18252	REC M003	W	05:15PM-06:35PM	Staff		
<b>ELE 391</b>	<b>Digital Circuits Laboratory — Prereq: ELE 292; Coreq: ELE 331.</b>						
	18188	SEC M001	MW	12:45PM-03:35PM	Marcy	3.0	
<b>ELE 416</b>	<b>Electromechanical Devices — Prereq: ELE 232.</b>						
	18654	SEC M001	MW	05:15PM-06:35PM	Bujanovic	3.0	meets with ELE 691/M001.
<b>ELE 417</b>	<b>Power Electronics — Prereq: ELE 314. Double numbered with ELE 617.</b>						
	18996	SEC M001	TTh	12:30PM-01:50PM	Eftekharijad	3.0	
<b>ELE 425</b>	<b>Microwave Engineering — Prereq: ELE 424.</b>						
	18430	SEC M001	MW	03:45PM-05:05PM	Song	3.0	
<b>ELE 464</b>	<b>Intro to Vlsi Design — Prereq: CSE 261. Crosslisted with CSE 464.</b>						
	<i>Enroll in Recitation M002</i>						
	18448	SEC M001	MW	10:35AM-11:30AM	Qiu	3.0	
	18450	REC M002	F	11:40AM-12:35PM	Qiu		
<b>ELE 491</b>	<b>Senior Design Project I</b>						
	18558	SEC M001	TTh	11:00AM-12:20PM	Marcy	1.0	
<b>ELE 516</b>	<b>Control of Robots — Crosslisted with CIS 543.</b>						
	18352	SEC M001	MW	02:15PM-03:35PM	Tetlev	3.0	
<b>ELE 551</b>	<b>Communication Systems — Prereq: ELE 351.</b>						
	<i>Register for Recitation M002 and Section M001 will auto-enroll.</i>						
	18326	SEC M001	TTh	02:00PM-03:20PM	Gursoy	3.0	
	18354	REC M002	F	12:45PM-01:40PM	Gursoy		
<b>ELE 591</b>	<b>Spec Prob Elec Eng</b>						
	18700	SEC M001	TTh	05:00PM-06:20PM	Bujanovic	3.0	Class Topic: Dist Gen Intgr in Smrt Grd. Meets with 691 M002.
<b>ELE 606</b>	<b>Probabilistic Methods/ECE</b>						
	18294	SEC M001	F	09:30AM-12:15PM	Chen	3.0	
<b>ELE 617</b>	<b>Power Electronics — Double numbered with ELE 417.</b>						
	18998	SEC M001	TTh	12:30PM-01:50PM	Eftekharijad	3.0	
<b>ELE 621</b>	<b>Electromagnetic Fields</b>						
	18328	SEC M001	TTh	02:00PM-03:20PM	Lee	3.0	
<b>ELE 633</b>	<b>Discrete &amp; Intgrt Circuit</b>						
	27127	SEC M001		TBA	Ghosh	3.0	
<b>ELE 659</b>	<b>Digital Signal Process I</b>						
	18330	SEC M001	M	09:30AM-12:30PM	Datta	3.0	
<b>ELE 664</b>	<b>VLSI Design Methods — Crosslisted with CSE 664.</b>						
	18446	SEC M001	MW	02:15PM-03:35PM	Wang	3.0	
<b>ELE 691</b>	<b>Special Topics in ELE</b>						
	18666	SEC M001	MW	05:15PM-06:35PM	Bujanovic	3.0	Class Topic: Electromechanical Devices. Meets with ELE 416.
	18702	SEC M002	TTh	05:00PM-06:20PM	Bujanovic	3.0	Class Topic: Dist. Gen. Intgr. in Smrt Grd. Meets with ELE 591 M001.

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Subject & Cat Nbr	Course Title		Component Type	Nbr	Meeting Days & Times	Instructor	Min Max Units	Comments
	Class Nbr							
<b>ELE 723</b>	<b>Microwave Transis. Amplifiers — Prereq: ELE 623.</b>							
	18694	SEC	M001		Th 05:00PM-06:20PM T 05:00PM-06:20PM	Choi	3.0	
<b>ELE 751</b>	<b>Wireless Communications — Prereq: ELE 606 and 651.</b>							
	18696	SEC	M001	TTh	09:30AM-10:50AM	Gursoy	3.0	
	18986	SEC	M002	W	10:35AM-01:20PM	Chen	3.0	Department Consent Required.
<b>ELE 791</b>	<b>Adv Topics in Elec Engrg</b>							
	18914	SEC	M001	W	03:45PM-08:05PM	Sarkar	3.0	Class Topic: Modern Antenna Theory.
	18916	SEC	M002	T	03:30PM-07:50PM	Sarkar	3.0	Class Topic: Integrated Circuits/High Speed.
	18698	SEC	M007	M	05:15PM-08:15PM	Datta	3.0	Class Topic: Real-time processing.
	18826	SEC	M010	M	05:15PM-08:00PM	Barnard	3.0	Class Topic: Modern Radar Tracking. O1 = Online Asynchronous Non-Res.
<b>ELE 996</b>	<b>Master's Project</b>							
	18190	SEC	M001		TBA	Staff	0.0	Department Consent Required. MSEE students matriculated fall 2010 or after not allowed to enroll.
<b>ELE 997</b>	<b>Masters Thesis</b>							
	18192	SEC	M001		TBA	Staff	1.0	6.0 Department Consent Required.
<b>MAE - Mechanical &amp; Aerospace Engrng</b>								
<b>MAE 312</b>	<b>Engineering Analysis — Prereq: ECS 104 and MAT 485.</b>							
	27307	SEC	M001	TTh	02:00PM-03:20PM	Sanyal	3.0	
<b>MAE 315</b>	<b>Mechncl/Aerosp Engr Lab — Prereq: ECS 325; Coreq: MAE 341.</b>							
	<i>Register for one Lab M002 - M009; Section M001 will auto-enroll.</i>							
	18194	SEC	M001	MW	08:25AM-09:20AM	Glauser	3.0	
	18254	LAB	M002	M	03:45PM-06:30PM	Glauser		
	18256	LAB	M003	M	12:45PM-03:45PM	Glauser		
	18258	LAB	M004	W	03:45PM-06:30PM	Glauser		
	18260	LAB	M005	W	12:45PM-03:45PM	Glauser		
	18262	LAB	M006	T	11:00AM-01:50PM	Glauser		
	18452	LAB	M007	Th	09:30AM-12:20PM	Glauser		
	18486	LAB	M008	F	12:45PM-03:35PM	Glauser		
	18514	LAB	M009	T	05:00PM-07:50PM	Glauser		
<b>MAE 341</b>	<b>Fluid Mechanics — Prereq: ECS 221 and MAT 397 and (PHY 211 or 215).</b>							
	<i>Register for 1 recitation M002-M007; main section M001 will auto-enroll.</i>							
	18196	SEC	M001	TTh	08:00AM-09:20AM F 11:40AM-12:35PM	Lewalle	4.0	
	18264	REC	M002	T	09:30AM-10:25AM	Lewalle		
	18266	REC	M003	W	10:35AM-11:30AM	Lewalle		
	18270	REC	M004	W	11:40AM-12:35PM	Lewalle		
	18268	REC	M005	Th	09:30AM-10:25AM	Lewalle		
	18272	REC	M006	W	05:15PM-06:10PM	Lewalle		
<b>MAE 430</b>	<b>Intro. to Design Optimization — Prereq: MAT 397 and MAT 414.</b>							
	27306	SEC	M001	TTh	08:00AM-09:20AM	Dannenhoffer	3.0	
<b>MAE 486</b>	<b>Fuel Cell Science &amp; Technology — Prereq: MAE 251.</b>							
	18804	SEC	M001	TTh	11:40AM-01:00PM	Ahn	3.0	Class meets at Center of Excellence.
<b>MAE 500</b>	<b>Selected Topics</b>							
	18794	SEC	M001	MW	05:15PM-06:35PM	Maroo	3.0	Class Topic: Fundmtl of Nano Sci/Nano Engr. To attain permission to enroll in the class, please email Professor Shalabh Maroo, scmaroo@syr.edu.
	19000	SEC	M002	TTh	03:30PM-04:50PM	Roppo	3.0	Class Topic: Linear Control Systems.
<b>MAE 510</b>	<b>Nuc Reactor Dsgn, Opr &amp; Sfty — Prereq: NUC 301 and MAE 551. Crosslisted with NUC 510.</b>							
	27340	SEC	M001	T	02:00PM-05:00PM	Khalifa	3.0	
<b>MAE 548</b>	<b>Engr Econ &amp; Tech Valuation — Prereq: MAT 296. Crosslisted with CIE 548.</b>							
	18428	SEC	M001	Th	03:30PM-06:15PM	Khalifa	3.0	
<b>MAE 553</b>	<b>HVAC Systems — Prereq: MAE 251.</b>							
	18424	SEC	M001	Th	09:30AM-12:15PM	Zhang	3.0	
<b>MAE 573</b>	<b>Applic of Finite Elemnt Anlsys — Prereq: ECS 325 and MAT 485.</b>							
	18990	SEC	M001	TTh	12:30PM-01:50PM	Dalir	3.0	
<b>MAE 588</b>	<b>Principles of Wind Turbines — Prereq: MAE 341. Crosslisted with CIE 588.</b>							
	18760	SEC	M001	TTh	05:00PM-06:20PM	Murthy	3.0	
<b>MAE 600</b>	<b>Selected Topics</b>							
	27407	SEC	M001	MW	03:45PM-05:05PM	Zhanq	3.0	Class Topic: Comp Methods Solid Mech.
<b>MAE 626</b>	<b>Vibration of Mech Systems</b>							
	18988	SEC	M001	TTh	12:30PM-01:50PM	Murthv	3.0	
<b>MAE 635</b>	<b>Adv Mech of Materials — Prereq: ECS 325.</b>							
	18382	SEC	M001	TTh	02:00PM-03:20PM	Davidson	3.0	
<b>MAE 643</b>	<b>Fluid Dynamics — Prereq: MAE 341 or CEN 333. Crosslisted with CEN 643.</b>							
	<i>meets with CEN 643</i>							
	18350	SEC	M001	TTh	05:00PM-06:20PM	Lewalle	3.0	
<b>MAE 655</b>	<b>Advanced Heat Transfer</b>							
	18624	SEC	M001	T	03:30PM-06:15PM	Ahn	3.0	
<b>MAE 675</b>	<b>Methods of Analysis/Mee</b>							
	18384	SEC	M001	MW	02:15PM-03:35PM	Levy	3.0	
<b>MAE 771</b>	<b>Computational Fluid Mech</b>							
	27308	SEC	M001	TTh	09:30AM-10:50AM	Dang	3.0	
<b>MAE 994</b>	<b>Capstone Project</b>							
	18388	SEC	M001		TBA	Staff	0.0	
<b>MAE 995</b>	<b>Graduate Seminar</b>							
	18286	SEC	M001	F	02:15PM-03:35PM	Staff	0.0	
<b>MEE - Mechanical Engineering</b>								
<b>MEE 416</b>	<b>Mechanical Egrng Lab — Prereq: MAE 251 and MAE 315 and MAE 341 and MAE 355.</b>							
	18406	SEC	M001	W	09:30AM-10:25AM	Zhang	1.0	Register for Lab M002-M005 and main section M001 will auto-enroll.
	18408	LAB	M002	M	12:45PM-03:35PM	Zhang		
	18410	LAB	M003	W	12:45PM-03:35PM	Zhang		
	18412	LAB	M004	Th	05:00PM-08:00PM	Zhang		
	18414	LAB	M005	T	03:30PM-06:20PM	Zhang		
<b>MEE 471</b>	<b>Synthesis Mchncl Syst I — Prereq: MEE 332 and MAE 184.</b>							
	18198	SEC	M001	TTh	02:00PM-03:20PM	Blum Carranti	3.0	
<b>MEE 571</b>	<b>Computer Aided Design — Prereq: MAE 184 and MAT 485.</b>							
	18200	SEC	M001	T Th	03:30PM-04:50PM 03:30PM-04:50PM	Roy	3.0	
<b>MEE 996</b>	<b>Special Projects</b>							
	18202	SEC	M001		TBA	Staff	1.0	6.0

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Subject & Cat Nbr	Course Title		Component		Meeting Days & Times	Instructor	Min Max Units	Comments
	Class Nbr	Type	Nbr	Nbr				
<b>MFE - Manufacturing Engineering</b>								
<b>MFE 639</b>	<b>Cad/Cam Systems</b>							
	18512	SEC	M001	T	09:30AM-12:15PM	Roy	3.0	
<b>NUC - Nuclear Energy Track</b>								
<b>NUC 510</b>	<b>Nuc Reactor Dsgn, Opr &amp; Sfty — Crosslisted with MAE 510.</b>							
	27341	SEC	M001	T	02:00PM-05:00PM	Khalifa	3.0	Meets with MAE 510.
<b>SIS - Systems &amp; Information Science</b>								
<b>SIS 100</b>	<b>Selected Topics</b>							
	18876	SEC	M002	MW	08:00AM-09:20AM	Staff	3.0	Class Topic: Freshman Forum. Required for all freshmen SIS students.