



# Productivity 2013/14 through 2017/18 Engineering (ENGR)

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## Productivity by Year

	Census Headcount	End of Term Headcount	FTEF	FTES	WSCH	Load	Sections	Max Enroll	Fill Rates
2013/14	280	242	2.36	37.38	1,122	475	15	437	64.1%
2014/15	329	294	2.16	45.97	1,379	639	14	352	93.5%
2015/16	282	244	2.63	40.04	1,201	457	16	393	71.8%
2016/17	300	282	2.76	42.61	1,278	463	14	378	79.4%
2017/18	222	199	2.43	32.31	969	399	10	303	73.3%

Census Headcount: Number of duplicated headcount at final census. End of Term Headcount: Number of duplicated headcount at the end of the term.  
 FTEF: Total number of full time equivalent faculty assigned. FTES: Total number of full time equivalent students enrolled at first census.  
 WSCH: Weekly student contact hours generated by census enrollments. Load: The ratio of WSCH to FTEF, used to measure productivity.  
 Sections: Total number of sections offered per semester. Max Enroll: The enrollment capacity or maximum enrollment as defined in curriculum.  
 Fill Rate: Census Headcount divided by Max Enrollment.

Data Source: SMCCD Data Warehouse

**Productivity by Semester**

	<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Fall 2013	86	77	1.21	14.46	434	358	7	132	65.2%
Fall 2014	109	98	0.85	17.00	510	598	6	112	97.3%
Fall 2015	88	73	1.28	15.46	464	362	8	146	60.3%
Fall 2016	63	61	0.92	11.58	347	378	5	108	58.3%
Fall 2017	69	65	1.28	13.35	400	313	4	128	53.9%
Spring 2014	183	154	1.15	21.82	655	571	7	280	65.4%
Spring 2015	212	188	1.31	26.78	803	615	7	230	92.2%
Spring 2016	189	166	1.35	23.10	693	515	7	235	80.4%
Spring 2017	208	192	1.55	24.67	740	478	7	220	94.5%
Spring 2018	138	119	1.15	17.47	524	457	5	155	89.0%
Summer 2013	11	11	0.00	1.10	33	#INF	1	25	44.0%
Summer 2014	8	8	0.00	2.19	66	#INF	1	10	80.0%
Summer 2015	5	5	0.00	1.49	45	#INF	1	12	41.7%
Summer 2016	29	29	0.29	6.37	191	651	2	50	58.0%
Summer 2017	15	15	0.00	1.50	45	#INF	1	20	75.0%

		<b><u>DE vs Non DE Courses</u></b>								
		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Fall 2013	FaceToFace	77	69	1.21	13.56	407	335	6	112	68.8%
	Online	9	8	0.00	0.90	27	#INF	1	20	45.0%
Fall 2014	FaceToFace	87	81	0.85	14.80	444	520	5	92	94.6%
	Online	22	17	0.00	2.20	66	#INF	1	20	110.0%
Fall 2015	FaceToFace	65	54	1.28	11.92	357	279	6	116	56.0%
	Online	23	19	0.00	3.54	106	#INF	2	30	76.7%
Fall 2016	FaceToFace	44	44	0.92	8.44	253	275	3	69	63.8%
	Online	19	17	0.00	3.14	94	#INF	2	39	48.7%
Fall 2017	FaceToFace	59	55	1.08	12.35	370	343	3	88	67.0%
	Online	10	10	0.20	1.00	30	150	1	40	25.0%
Spring 2014	FaceToFace	116	102	1.15	15.12	454	396	5	170	68.2%
	Online	67	52	0.00	6.70	201	#INF	2	110	60.9%
Spring 2015	FaceToFace	158	145	1.31	21.38	641	491	5	170	92.9%
	Online	54	43	0.00	5.40	162	#INF	2	60	90.0%
Spring 2016	FaceToFace	152	139	1.15	19.40	582	508	5	150	101.3%
	Online	37	27	0.20	3.70	111	555	2	85	43.5%
Spring 2017	FaceToFace	148	141	1.15	18.67	560	488	5	155	95.5%
	Online	60	51	0.40	6.00	180	450	2	65	92.3%
Spring 2018	FaceToFace	138	119	1.15	17.47	524	457	5	155	89.0%
Summer 2013	FaceToFace	11	11	0.00	1.10	33	#INF	1	25	44.0%
Summer 2014	FaceToFace	8	8	0.00	2.19	66	#INF	1	10	80.0%
Summer 2015	FaceToFace	5	5	0.00	1.49	45	#INF	1	12	41.7%
Summer 2016	FaceToFace	29	29	0.29	6.37	191	651	2	50	58.0%
Summer 2017	FaceToFace	15	15	0.00	1.50	45	#INF	1	20	75.0%

**Basic Skills vs Non Basic Skills Courses**

		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Fall 2013	Non Basic Skills	86	77	1.21	14.46	434	358	7	132	65.2%
	Total	86	77	1.21	14.46	434	358	7	132	65.2%
Fall 2014	Non Basic Skills	109	98	0.85	17.00	510	598	6	112	97.3%
	Total	109	98	0.85	17.00	510	598	6	112	97.3%
Fall 2015	Non Basic Skills	88	73	1.28	15.46	464	362	8	146	60.3%
	Total	88	73	1.28	15.46	464	362	8	146	60.3%
Fall 2016	Non Basic Skills	63	61	0.92	11.58	347	378	5	108	58.3%
	Total	63	61	0.92	11.58	347	378	5	108	58.3%
Fall 2017	Non Basic Skills	69	65	1.28	13.35	400	313	4	128	53.9%
	Total	69	65	1.28	13.35	400	313	4	128	53.9%
Spring 2014	Non Basic Skills	183	154	1.15	21.82	655	571	7	280	65.4%
	Total	183	154	1.15	21.82	655	571	7	280	65.4%
Spring 2015	Non Basic Skills	212	188	1.31	26.78	803	615	7	230	92.2%
	Total	212	188	1.31	26.78	803	615	7	230	92.2%
Spring 2016	Non Basic Skills	189	166	1.35	23.10	693	515	7	235	80.4%
	Total	189	166	1.35	23.10	693	515	7	235	80.4%
Spring 2017	Non Basic Skills	208	192	1.55	24.67	740	478	7	220	94.5%
	Total	208	192	1.55	24.67	740	478	7	220	94.5%
Spring 2018	Non Basic Skills	138	119	1.15	17.47	524	457	5	155	89.0%
	Total	138	119	1.15	17.47	524	457	5	155	89.0%
Summer 2013	Non Basic Skills	11	11	0.00	1.10	33	#INF	1	25	44.0%
	Total	11	11	0.00	1.10	33	#INF	1	25	44.0%
Summer 2014	Non Basic Skills	8	8	0.00	2.19	66	#INF	1	10	80.0%
	Total	8	8	0.00	2.19	66	#INF	1	10	80.0%
Summer 2015	Non Basic Skills	5	5	0.00	1.49	45	#INF	1	12	41.7%
	Total	5	5	0.00	1.49	45	#INF	1	12	41.7%
Summer 2016	Non Basic Skills	29	29	0.29	6.37	191	651	2	50	58.0%

**Basic Skills vs Non Basic Skills Courses**

		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Summer 2017	Total	29	29	0.29	6.37	191	651	2	50	58.0%
	Non Basic Skills	15	15	0.00	1.50	45	#INF	1	20	75.0%
	Total	15	15	0.00	1.50	45	#INF	1	20	75.0%

**CTE vs NonCTE Courses**

		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Fall 2013	Non CTE	86	77	1.21	14.46	434	358	7	132	65.2%
	Total	86	77	1.21	14.46	434	358	7	132	65.2%
Fall 2014	Non CTE	109	98	0.85	17.00	510	598	6	112	97.3%
	Total	109	98	0.85	17.00	510	598	6	112	97.3%
Fall 2015	Non CTE	88	73	1.28	15.46	464	362	8	146	60.3%
	Total	88	73	1.28	15.46	464	362	8	146	60.3%
Fall 2016	Non CTE	63	61	0.92	11.58	347	378	5	108	58.3%
	Total	63	61	0.92	11.58	347	378	5	108	58.3%
Fall 2017	Non CTE	69	65	1.28	13.35	400	313	4	128	53.9%

**CTE vs NonCTE Courses**

		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Spring 2014	Total	69	65	1.28	13.35	400	313	4	128	53.9%
	Non CTE	183	154	1.15	21.82	655	571	7	280	65.4%
Spring 2015	Total	183	154	1.15	21.82	655	571	7	280	65.4%
	Non CTE	212	188	1.31	26.78	803	615	7	230	92.2%
Spring 2016	Total	212	188	1.31	26.78	803	615	7	230	92.2%
	Non CTE	189	166	1.35	23.10	693	515	7	235	80.4%
Spring 2017	Total	189	166	1.35	23.10	693	515	7	235	80.4%
	Non CTE	208	192	1.55	24.67	740	478	7	220	94.5%
Spring 2018	Total	208	192	1.55	24.67	740	478	7	220	94.5%
	Non CTE	138	119	1.15	17.47	524	457	5	155	89.0%
Summer 2013	Total	138	119	1.15	17.47	524	457	5	155	89.0%
	Non CTE	11	11	0.00	1.10	33	#INF	1	25	44.0%
Summer 2014	Total	11	11	0.00	1.10	33	#INF	1	25	44.0%
	Non CTE	8	8	0.00	2.19	66	#INF	1	10	80.0%
Summer 2015	Total	8	8	0.00	2.19	66	#INF	1	10	80.0%
	Non CTE	5	5	0.00	1.49	45	#INF	1	12	41.7%
Summer 2016	Total	5	5	0.00	1.49	45	#INF	1	12	41.7%
	Non CTE	29	29	0.29	6.37	191	651	2	50	58.0%
Summer 2017	Total	29	29	0.29	6.37	191	651	2	50	58.0%
	Non CTE	15	15	0.00	1.50	45	#INF	1	20	75.0%
	Total	15	15	0.00	1.50	45	#INF	1	20	75.0%

<b>Transfer vs Non Transfer Courses</b>										
		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Fall 2013	Yes	86	77	1.21	14.46	434	358	7	132	65.2%
	Total	86	77	1.21	14.46	434	358	7	132	65.2%
Fall 2014	Yes	109	98	0.85	17.00	510	598	6	112	97.3%
	Total	109	98	0.85	17.00	510	598	6	112	97.3%
Fall 2015	Yes	88	73	1.28	15.46	464	362	8	146	60.3%
	Total	88	73	1.28	15.46	464	362	8	146	60.3%
Fall 2016	Yes	63	61	0.92	11.58	347	378	5	108	58.3%
	Total	63	61	0.92	11.58	347	378	5	108	58.3%
Fall 2017	Yes	69	65	1.28	13.35	400	313	4	128	53.9%
	Total	69	65	1.28	13.35	400	313	4	128	53.9%
Spring 2014	Yes	183	154	1.15	21.82	655	571	7	280	65.4%
	Total	183	154	1.15	21.82	655	571	7	280	65.4%
Spring 2015	Yes	212	188	1.31	26.78	803	615	7	230	92.2%
	Total	212	188	1.31	26.78	803	615	7	230	92.2%
Spring 2016	Yes	189	166	1.35	23.10	693	515	7	235	80.4%
	Total	189	166	1.35	23.10	693	515	7	235	80.4%
Spring 2017	Yes	208	192	1.55	24.67	740	478	7	220	94.5%
	Total	208	192	1.55	24.67	740	478	7	220	94.5%
Spring 2018	Yes	138	119	1.15	17.47	524	457	5	155	89.0%
	Total	138	119	1.15	17.47	524	457	5	155	89.0%
Summer 2013	Yes	11	11	0.00	1.10	33	#INF	1	25	44.0%
	Total	11	11	0.00	1.10	33	#INF	1	25	44.0%
Summer 2014	Yes	8	8	0.00	2.19	66	#INF	1	10	80.0%
	Total	8	8	0.00	2.19	66	#INF	1	10	80.0%
Summer 2015	Yes	5	5	0.00	1.49	45	#INF	1	12	41.7%
	Total	5	5	0.00	1.49	45	#INF	1	12	41.7%
Summer 2016	Yes	29	29	0.29	6.37	191	651	2	50	58.0%
	Total	29	29	0.29	6.37	191	651	2	50	58.0%

**Transfer vs Non Transfer Courses**

Summer 2017

	<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Yes	15	15	0.00	1.50	45	#INF	1	20	75.0%
Total	15	15	0.00	1.50	45	#INF	1	20	75.0%



**Day vs Evening Courses**

		<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rates</b>
Fall 2013	Day	54	47	0.92	9.35	280	305	4	82	65.9%
	Evening	32	30	0.29	5.12	154	523	3	50	64.0%
Fall 2014	Day	55	50	0.56	9.15	274	490	3	56	98.2%
	Evening	54	48	0.29	7.85	236	803	3	56	96.4%
Fall 2015	Day	47	37	0.92	8.32	249	271	4	80	58.8%
	Evening	41	36	0.36	7.14	214	595	4	66	62.1%
Fall 2016	Day	44	44	0.92	8.44	253	275	3	69	63.8%
	Evening	19	17	0.00	3.14	94	#INF	2	39	48.7%
Fall 2017	Day	59	55	1.08	12.35	370	343	3	88	67.0%
	Evening	10	10	0.20	1.00	30	150	1	40	25.0%
Spring 2014	Day	56	47	0.69	6.82	205	295	3	105	53.3%
	Evening	127	107	0.45	15.00	450	993	4	175	72.6%
Spring 2015	Day	76	70	0.69	9.58	287	415	3	90	84.4%
	Evening	136	118	0.61	17.20	516	841	4	140	97.1%
Spring 2016	Day	88	78	0.69	11.00	330	476	3	90	97.8%
	Evening	101	88	0.65	12.10	363	556	4	145	69.7%
Spring 2017	Day	115	108	0.99	15.37	461	467	4	125	92.0%
	Evening	93	84	0.56	9.30	279	498	3	95	97.9%
Spring 2018	Day	138	119	1.15	17.47	524	457	5	155	89.0%
Summer 2013	Day	11	11	0.00	1.10	33	#INF	1	25	44.0%
Summer 2014	Day	8	8	0.00	2.19	66	#INF	1	10	80.0%
Summer 2015	Day	5	5	0.00	1.49	45	#INF	1	12	41.7%
Summer 2016	Day	29	29	0.29	6.37	191	651	2	50	58.0%
Summer 2017	Day	15	15	0.00	1.50	45	#INF	1	20	75.0%

**Productivity by Courses by Semester**

				Census Headcount	End of Term Headcount	FTEF	FTES	WSCH	Load	Sections	Max Enroll	Fill Rate
<b>Fall 2013</b>	ENGR	111	Surveying	12	11	0.36	2.64	79	220	1	24	50%
		210	Engineering Graphics	23	20	0.36	4.91	147	409	1	28	82%
		240	Engineering Dynamics	25	21	0.20	2.50	75	375	2	80	31%
		270	Materials Science	23	22	0.29	4.22	127	431	2	60	38%
		695	Independent Study	3	3	0.00	0.20	6	#INF	1	10	30%
	Total			86	77	1.21	14.46	434	358	7	202	43%
<b>Fall 2014</b>	ENGR	210	Engineering Graphics	33	29	0.36	7.04	211	587	1	28	118%
		240	Engineering Dynamics	42	36	0.20	4.20	126	630	2	80	53%
		270	Materials Science	32	31	0.29	5.65	170	578	2	72	44%
		695	Independent Study	2	2	0.00	0.11	3	#INF	1	8	25%
	Total			109	98	0.85	17.00	510	598	6	188	58%
<b>Fall 2015</b>	ENGR	111	Surveying	13	13	0.36	2.86	86	238	1	24	54%
		210	Engineering Graphics	31	20	0.36	6.49	195	541	2	38	82%
		240	Engineering Dynamics	24	22	0.20	2.40	72	360	2	80	30%
		270	Materials Science	18	17	0.36	3.60	108	300	2	72	25%
		695	Independent Study	2	1	0.00	0.10	3	#INF	1	8	25%
	Total			88	73	1.28	15.46	464	362	8	222	40%
<b>Fall 2016</b>	ENGR	210	Engineering Graphics	30	29	0.36	6.28	188	523	2	76	39%
		240	Engineering Dynamics	13	12	0.20	1.30	39	195	2	80	16%

**Productivity by Courses by Semester**

				Census Headcount	End of Term Headcount	FTEF	FTES	WSCH	Load	Sections	Max Enroll	Fill Rate
		270	Materials Science	20	20	0.36	4.00	120	333	1	30	67%
		Total		63	61	0.92	11.58	347	378	5	186	34%
<b>Fall 2017</b>	ENGR	111	Surveying	10	10	0.36	2.20	66	183	1	30	33%
		210	Engineering Graphics	26	23	0.36	5.55	166	462	1	28	93%
		240	Engineering Dynamics	10	10	0.20	1.00	30	150	1	40	25%
		270	Materials Science	23	22	0.36	4.60	138	383	1	30	77%
		Total		69	65	1.28	13.35	400	313	4	128	54%
<b>Spring 2014</b>	ENGR	100	Introduction to Engineering	30	26	0.29	5.00	150	511	1	35	86%
		215	Comput. Methods Engr/Scientist	16	11	0.29	2.67	80	273	1	30	53%
		230	Statics	45	38	0.20	4.65	140	698	2	90	50%
		260	Circuits and Devices	45	34	0.00	4.50	135	#INF	1	60	75%
			Circuits And Devices - Honors	17	16	0.20	1.70	51	255	1	35	49%
		261	Circuits & Devic. Lab. -Honors	30	29	0.16	3.30	99	619	1	30	100%
		Total		183	154	1.15	21.82	655	571	7	280	65%
<b>Spring 2015</b>	ENGR	100	Introduction to Engineering	49	42	0.45	8.17	245	540	1	50	98%
		215	Comput. Methods Engr/Scientist	28	26	0.29	4.67	140	477	1	30	93%
		230	Statics	37	33	0.20	3.81	114	572	2	100	37%
		260	Circuits And Devices	31	28	0.20	3.10	93	465	1	70	44%
			Circuits and Devices	34	26	0.00	3.40	102	#INF	1	70	49%

**Productivity by Courses by Semester**

				Census Headcount	End of Term Headcount	FTEF	FTES	WSCH	Load	Sections	Max Enroll	Fill Rate
		261	Circuits & Devic. Lab.	33	33	0.16	3.63	109	681	1	30	110%
	Total			212	188	1.31	26.78	803	615	7	350	61%
<b>Spring 2016</b>	ENGR	100	Introduction to Engineering	30	28	0.29	5.00	150	511	1	30	100%
		215	Comput. Methods Engr/Scientist	33	27	0.29	5.50	165	563	1	30	110%
		230	Statics	35	29	0.20	3.50	105	525	2	100	35%
		260	Circuits And Devices	31	28	0.20	3.10	93	465	1	35	89%
			Circuits and Devices	26	21	0.20	2.60	78	390	1	60	43%
		261	Circuits & Devic. Lab.	34	33	0.16	3.40	102	638	1	30	113%
	Total			189	166	1.35	23.10	693	515	7	285	66%
<b>Spring 2017</b>	ENGR	100	Introduction to Engineering	28	28	0.29	4.67	140	477	1	30	93%
		215	Comput. Methods Engr/Scientist	30	26	0.29	5.00	150	511	1	30	100%
		230	Statics	49	43	0.40	4.90	147	368	2	60	82%
		260	Circuits And Devices	37	36	0.20	3.70	111	555	1	35	106%
			Circuits and Devices	31	26	0.20	3.10	93	465	1	35	89%
		261	Circuits & Devic. Lab.	33	33	0.16	3.30	99	619	1	30	110%
	Total			208	192	1.55	24.67	740	478	7	220	95%
<b>Spring 2018</b>	ENGR	100	Introduction to Engineering	29	25	0.29	4.83	145	494	1	30	97%
		215	Comput. Methods Engr/Scientist	26	18	0.29	4.33	130	443	1	30	87%
		230	Statics	23	21	0.20	2.30	69	345	1	30	77%
		260	Circuits And Devices	35	31	0.20	3.50	105	525	1	35	100%

**Productivity by Courses by Semester**

				<b>Census Headcount</b>	<b>End of Term Headcount</b>	<b>FTEF</b>	<b>FTES</b>	<b>WSCH</b>	<b>Load</b>	<b>Sections</b>	<b>Max Enroll</b>	<b>Fill Rate</b>
		261	Circuits & Devic. Lab.	25	24	0.16	2.50	75	469	1	30	83%
	Total			138	119	1.15	17.47	524	457	5	155	89%
<b>Summer 2013</b>	ENGR	695	Independent Study	11	11	0.00	1.10	33	#INF	1	25	44%
	Total			11	11	0.00	1.10	33	#INF	1	25	44%
<b>Summer 2014</b>	ENGR	695	Independent Study	8	8	0.00	2.19	66	#INF	1	10	80%
	Total			8	8	0.00	2.19	66	#INF	1	10	80%
<b>Summer 2015</b>	ENGR	695	Independent Study	5	5	0.00	1.49	45	#INF	1	12	42%
	Total			5	5	0.00	1.49	45	#INF	1	12	42%
<b>Summer 2016</b>	ENGR	100	Introduction to Engineering	16	16	0.29	2.66	80	272	1	30	53%
		695	Independent Study	13	13	0.00	3.70	111	#INF	1	20	65%
	Total			29	29	0.29	6.37	191	651	2	50	58%
<b>Summer 2017</b>	ENGR	695	Independent Study	15	15	0.00	1.50	45	#INF	1	20	75%
	Total			15	15	0.00	1.50	45	#INF	1	20	75%