

Electric 2018

Overall Results

Place	Car Num	Team	Penalty	Cost Score	Presentation Score	Design Score	Acceleration Score	Skid Pad Score	Autocross Score	Endurance Score	Efficiency Score	Total Score
1	223	Carnegie Mellon Univ	-10	74.5	71.2	90	81.6	61.3	98.1	240.0	92.9	799.6
2	234	McGill Univ		69.7	68.2	130	97.3	64.8	101.0	144.4	96.8	772.2
3	205	Univ of Washington		57.2	71.3	140			86.9	275.0	91.4	721.7
4	208	Univ of Wisconsin - Madison		66.9	66.2	150	58.9	62.9		46	96.8	548.3
5	202	Massachusetts Inst of Tech		76.0	57.7	100	100.0	70.7	125.0			529.4
6	217	Georgia Institute of Technology		91.2	54.6	60			52.1	121.2	97.6	476.7
7	225	Purdue Univ - W Lafayette		57.1	39.9	70	93.1	75.0	117.8	1		453.9
8	203	Universidade Estadual de Campinas		71.8	70.2	100	92.2					334.3
9	230	Montreal Polytechnique		77.9	48.7	50				8	100.0	284.6
10	232	Univ of Manitoba		55.5	59.3	50				9	94.8	268.7
11	201	Univ of Pennsylvania		74.6	75.0	110						259.6
12	204	Missouri University of Science and Tech		88.0	74.7	70						232.7
13	220	Univ of Illinois - Urbana Champaign		69.6	39.7	100			6.5			215.8
14	209	California Polytechnic State Univ-SLO	-48	71.7	68.4	100						192.1
15	233	San Jose State University		66.0	43.6	80						189.6
16	214	Kookmin Univ		81.0	41.9	30						152.9
17	206	Univ of Calif - Davis		91.6		60						151.6
18	219	Univ of Texas - Austin	-10	79.6	25.7	50						145.4
19	229	California Institute of Technology		60.8	33.6	30						124.4
20	231	Univ of Texas - San Antonio		89.3		30						119.3
21	213	Univ of Calif - Irvine	-10	-9.3	43.6	60						84.2
	207	Virginia Tech										withdrawn
	210	Univ of Kansas - Lawrence										withdrawn
	215	Univ of Akron										withdrawn
	216	Florida Inst of Tech										withdrawn
	218	Univ of Waterloo										withdrawn
	221	Univ of Calif - Santa Cruz										withdrawn
	222	Univ of Ontario Institute of Tech										withdrawn
	224	San Diego State Univ										withdrawn
	228	Univ of Utah										withdrawn

Electric 2018

Design Event Results

Place	Car Num	Team	Raw Score	Penalty	Status	Score
1	208	Univ of Wisconsin - Madison	150		Final	150
2	205	Univ of Washington	140		Final	140
3	234	McGill Univ	130		Final	130
4	201	Univ of Pennsylvania	110		Final	110
5 T	202	Massachusetts Inst of Tech	100			100
5 T	203	Universidade Estadual de Campinas	100			100
5 T	209	California Polytechnic State Univ-SLO	100			100
5 T	220	Univ of Illinois - Urbana Champaign	100			100
9	223	Carnegie Mellon Univ	90			90
10	233	San Jose State University	80			80
11 T	204	Missouri University of Science and Tech	70			70
11 T	225	Purdue Univ - W Lafayette	70			70
13 T	206	Univ of Calif - Davis	70	10		60
13 T	213	Univ of Calif - Irvine	60			60
13 T	217	Georgia Institute of Technology	60			60
16 T	219	Univ of Texas - Austin	50			50
16 T	230	Montreal Polytechnique	50			50
16 T	232	Univ of Manitoba	50			50
19 T	214	Kookmin Univ	30			30
19 T	229	California Institute of Technology	40	10		30
19 T	231	Univ of Texas - San Antonio	30			30
	207	Virginia Tech				
	210	Univ of Kansas - Lawrence				
	215	Univ of Akron				
	216	Florida Inst of Tech				
	218	Univ of Waterloo				
	221	Univ of Calif - Santa Cruz				
	222	Univ of Ontario Institute of Tech				
	224	San Diego State Univ				
	228	Univ of Utah				

Electric 2018

Presentation Event Results

Place	Car Num	Team	Score
1	201	Univ of Pennsylvania	75
2	204	Missouri University of Science and Tech	74.7
3	205	Univ of Washington	71.3
4	223	Carnegie Mellon Univ	71.2
5	203	Universidade Estadual de Campinas	70.2
6	209	California Polytechnic State Univ-SLO	68.4
7	234	McGill Univ	68.2
8	208	Univ of Wisconsin - Madison	66.2
9	232	Univ of Manitoba	59.3
10	202	Massachusetts Inst of Tech	57.7
11	217	Georgia Institute of Technology	54.6
12	230	Montreal Polytechnique	48.7
13 T	213	Univ of Calif - Irvine	43.6
13 T	233	San Jose State University	43.6
15	214	Kookmin Univ	41.9
16	225	Purdue Univ - W Lafayette	39.9
17	220	Univ of Illinois - Urbana Champaign	39.7
18	229	California Institute of Technology	33.5
19	219	Univ of Texas - Austin	25.7
	206	Univ of Calif - Davis	
	207	Virginia Tech	
	210	Univ of Kansas - Lawrence	
	215	Univ of Akron	
	216	Florida Inst of Tech	
	218	Univ of Waterloo	
	221	Univ of Calif - Santa Cruz	
	222	Univ of Ontario Institute of Tech	
	224	San Diego State Univ	
	228	Univ of Utah	
	231	Univ of Texas - San Antonio	

Electric 2018

Cost Event Results

Place	Car Num	Team	Adjusted Cost	Price Score (40)	Cost Audit	Report Score (20)	Part Content / Feasibility (20)	Real Case (20)	Penalty	Score
1	206	Univ of Calif - Davis	\$16,758	34.5		17.1	20	20		91.61
2	217	Georgia Institute of Technology	\$15,350	40	-1	12.2	20	20		91.16
3	231	Univ of Texas - San Antonio	\$15,415	39.72	-3	17.5	20	15		89.25
4	204	Missouri University of Science and Tech	\$17,796	31	-3	20	20	20		88
5	214	Kookmin Univ	\$16,318	36.11	-6	15.9	20	15		80.99
6	219	Univ of Texas - Austin	\$20,769	22.92		16.7	20	20		79.62
7	230	Montreal Polytechnique	\$17,969	30.46	-3	13.4	20	17		77.86
8	202	Massachusetts Inst of Tech	\$22,432	19.33		16.7	20	20		76
9	201	Univ of Pennsylvania	\$23,446	17.39		19.2	20	18		74.57
10	223	Carnegie Mellon Univ	\$23,687	16.95		17.5	20	20		74.45
11	203	Universidade Estadual de Campinas	\$23,104	18.02		13.8	20	20		71.84
12	209	California Polytechnic State Univ-SLO	\$21,499	21.27		15.5	20	15		71.74
13	234	McGill Univ	\$26,683	12.19		17.5	20	20		69.72
14	220	Univ of Illinois - Urbana Champaign	\$20,344	23.93	-1	16.7	20	10		69.63
15	208	Univ of Wisconsin - Madison	\$27,250	11.41		17.5	20	18		66.91
16	233	San Jose State University	\$30,322	7.67		18.4	20	20		66.02
17	229	California Institute of Technology	\$31,319	6.61		14.2	20	20		60.84
18	205	Univ of Washington	\$38,688	0.5		16.7	20	20		57.2
19	225	Purdue Univ - W Lafayette	\$28,071	10.33		11.8	20	15		57.08
20	232	Univ of Manitoba	\$39,451			17.5	20	18		55.53
21	213	Univ of Calif - Irvine	\$21,801	20.62		15.1	20	15	-80	-9.33
	207	Virginia Tech								
	210	Univ of Kansas - Lawrence								
	215	Univ of Akron								
	216	Florida Inst of Tech								
	218	Univ of Waterloo								
	221	Univ of Calif - Santa Cruz								
	222	Univ of Ontario Institute of Tech								
	224	San Diego State Univ								
	228	Univ of Utah								

Acceleration Event Results

Electric 2018

Minimum Time (seconds) 4.121
 Maximum Time (seconds) 6.181 150%

Cone Penalty (seconds) 2

Place	Car Num	Team	Run #1			Run #2			Run #3			Run #4			Final		
			Time	Cones	AdjTime	Time	Cones	AdjTime	Time	Cones	AdjTime	Time	Cones	AdjTime	Best Time	Penalty	Score
1	202	Massachusetts Inst of Tech			DNF	4.121		4.121	4.509		4.509	4.335		4.335	4.121		100
2	234	McGill Univ	4.352		4.352	4.159		4.159	5.641		5.641	4.392		4.392	4.159		97.34
3	225	Purdue Univ - W Lafayette	4.372		4.372	4.223		4.223	4.507		4.507	4.444		4.444	4.223		93.08
4	203	Universidade Estadual de Campinas	4.235		4.235	5.052		5.052			DNA			DNA	4.235		92.25
5	223	Carnegie Mellon Univ	4.377	1	6.377	4.404		4.404	4.801		4.801	4.450		4.450	4.404		81.56
6	208	Univ of Wisconsin - Madison	5.372		5.372	5.076		5.076	4.810		4.810			DNA	4.810		58.94
	201	Univ of Pennsylvania			DNA			DNA			DNA			DNA	DNA		
	204	Missouri University of Science and Tech			DNA			DNA			DNA			DNA	DNA		
	205	Univ of Washington			DNA			DNA			DNA			DNA	DNA		
	206	Univ of Calif - Davis			DNA			DNA			DNA			DNA	DNA		
	207	Virginia Tech			DNA			DNA			DNA			DNA	DNA		
	209	California Polytechnic State Univ-SLO			DNA			DNA			DNA			DNA	DNA		
	210	Univ of Kansas - Lawrence			DNA			DNA			DNA			DNA	DNA		
	213	Univ of Calif - Irvine			DNA			DNA			DNA			DNA	DNA		
	214	Kookmin Univ			DNA			DNA			DNA			DNA	DNA		
	215	Univ of Akron			DNA			DNA			DNA			DNA	DNA		
	216	Florida Inst of Tech			DNA			DNA			DNA			DNA	DNA		
	217	Georgia Institute of Technology			DNA			DNA			DNA			DNA	DNA		
	218	Univ of Waterloo			DNA			DNA			DNA			DNA	DNA		
	219	Univ of Texas - Austin			DNA			DNA			DNA			DNA	DNA		
	220	Univ of Illinois - Urbana Champaign			DNA			DNA			DNA			DNA	DNA		
	221	Univ of Calif - Santa Cruz			DNA			DNA			DNA			DNA	DNA		
	222	Univ of Ontario Institute of Tech			DNA			DNA			DNA			DNA	DNA		
	224	San Diego State Univ			DNA			DNA			DNA			DNA	DNA		
	228	Univ of Utah			DNA			DNA			DNA			DNA	DNA		
	229	California Institute of Technology			DNA			DNA			DNA			DNA	DNA		
	230	Montreal Polytechnique			DNA			DNA			DNA			DNA	DNA		
	231	Univ of Texas - San Antonio			DNA			DNA			DNA			DNA	DNA		
	232	Univ of Manitoba			DNA			DNA			DNA			DNA	DNA		
	233	San Jose State University			DNA			DNA			DNA			DNA	DNA		

Skidpad Event Results

Electric 2018

Minimum Time (seconds) 5.274
 Maximum Time (seconds) 7.648 145%

Cone Penalty (seconds) 0.25

Place	Car Num	Team	Driver 1 Run 1				Driver 1 Run 2				Driver 2 Run 1				Driver 2 Run 2				Best Time	Penalty	Score
			Time R	Time L	Cones	AdjTime	Time R	Time L	Cones	AdjTime	Time R	Time L	Cones	AdjTime	Time R	Time L	Cones	AdjTime			
1	225	Purdue Univ - W Lafayette	5.283	5.266		5.274	5.297	5.157	1	5.352	5.623	5.513		5.568	5.263	5.377		5.320	5.274		75
2	202	Massachusetts Inst of Tech	5.577	5.360		5.468	5.487	5.250		5.368	5.360	5.360	1	5.485	5.360	5.360		5.360	5.360		70.66
3	234	McGill Univ	5.734	6.063	3	6.273	5.530	5.530		5.530	6.470	5.813		6.141	5.703	5.263		5.483	5.483		64.81
4	208	Univ of Wisconsin - Madison	6.343	5.797		6.070	5.797	5.540		5.668	5.906	5.906		5.906	5.580	5.470		5.525	5.525		62.89
5	223	Carnegie Mellon Univ	5.407	5.716		5.561	5.310	20.847	1	13.203	7.173	7.780		7.476	7.126	7.151		7.138	5.561		61.29
	201	Univ of Pennsylvania				DNA				DNA				DNA				DNA	DNA		
	203	Universidade Estadual de Campinas				DNA				DNA				DNA				DNA	DNA		
	204	Missouri University of Science and Tech				DNA				DNA				DNA				DNA	DNA		
	205	Univ of Washington				DNA				DNA				DNA				DNA	DNA		
	206	Univ of Calif - Davis				DNA				DNA				DNA				DNA	DNA		
	207	Virginia Tech				DNA				DNA				DNA				DNA	DNA		
	209	California Polytechnic State Univ-SLO				DNA				DNA				DNA				DNA	DNA		
	210	Univ of Kansas - Lawrence				DNA				DNA				DNA				DNA	DNA		
	213	Univ of Calif - Irvine				DNA				DNA				DNA				DNA	DNA		
	214	Kookmin Univ				DNA				DNA				DNA				DNA	DNA		
	215	Univ of Akron				DNA				DNA				DNA				DNA	DNA		
	216	Florida Inst of Tech				DNA				DNA				DNA				DNA	DNA		
	217	Georgia Institute of Technology				DNA				DNA				DNA				DNA	DNA		
	218	Univ of Waterloo				DNA				DNA				DNA				DNA	DNA		
	219	Univ of Texas - Austin				DNA				DNA				DNA				DNA	DNA		
	220	Univ of Illinois - Urbana Champaign				DNA				DNA				DNA				DNA	DNA		
	221	Univ of Calif - Santa Cruz				DNA				DNA				DNA				DNA	DNA		
	222	Univ of Ontario Institute of Tech				DNA				DNA				DNA				DNA	DNA		
	224	San Diego State Univ				DNA				DNA				DNA				DNA	DNA		
	228	Univ of Utah				DNA				DNA				DNA				DNA	DNA		
	229	California Institute of Technology				DNA				DNA				DNA				DNA	DNA		
	230	Montreal Polytechnique				DNA				DNA				DNA				DNA	DNA		
	231	Univ of Texas - San Antonio				DNA				DNA				DNA				DNA	DNA		
	232	Univ of Manitoba				DNA				DNA				DNA				DNA	DNA		
	233	San Jose State University				DNA				DNA				DNA				DNA	DNA		

Autocross Event Results

Electric 2018

Minimum Time (seconds) 59.813 Cone Penalty (seconds) 2
 Maximum Time (seconds) 86.729 145% Off Course Penalty (seconds) 20

Place	Car Num	Team	Run #1				Run #2				Run #3				Run #4				Best Time	Penalty	Score
			Time	Cones	Off Course	AdjTime	Time	Cones	Off Course	AdjTime	Time	Cones	Off Course	AdjTime	Time	Cones	Off Course	AdjTime			
1	202	Massachusetts Inst of Tech	66.019			66.019	63.188			63.188	61.835			61.835	59.813			59.813	59.813		125
2	225	Purdue Univ - W Lafayette	62.679			62.679	60.962			60.962				DNF				DNF	60.962		117.8
3	234	McGill Univ	79.932		1	99.932	73.024			73.024				DNF	63.830			63.830	63.830		100.97
4	223	Carnegie Mellon Univ	68.583			68.583	64.338			64.338	69.949	2		73.949				DNF	64.338		98.14
5	205	Univ of Washington	67.853			67.853	66.441			66.441				DNA				DNA	66.441		86.91
6	217	Georgia Institute of Technology	74.462			74.462	73.933			73.933				DNF	149.904	4		157.904	73.933		52.08
7	220	Univ of Illinois - Urbana Champaign	126.193			126.193	76.224	1		96.224				DNF				DNA	96.224		6.5
	201	Univ of Pennsylvania				DNA				DNA				DNA				DNA	DNA		
	203	Universidade Estadual de Campinas				DNA				DNA				DNA				DNA	DNA		
	204	Missouri University of Science and Tech				DNA				DNA				DNA				DNA	DNA		
	206	Univ of Calif - Davis				DNA				DNA				DNA				DNA	DNA		
	207	Virginia Tech				DNA				DNA				DNA				DNA	DNA		
	208	Univ of Wisconsin - Madison				DNF				DNA				DNA				DNA	DNA		
	209	California Polytechnic State Univ-SLO				DNA				DNA				DNA				DNA	DNA		
	210	Univ of Kansas - Lawrence				DNA				DNA				DNA				DNA	DNA		
	213	Univ of Calif - Irvine				DNA				DNA				DNA				DNA	DNA		
	214	Kookmin Univ				DNA				DNA				DNA				DNA	DNA		
	215	Univ of Akron				DNA				DNA				DNA				DNA	DNA		
	216	Florida Inst of Tech				DNA				DNA				DNA				DNA	DNA		
	218	Univ of Waterloo				DNA				DNA				DNA				DNA	DNA		
	219	Univ of Texas - Austin				DNA				DNA				DNA				DNA	DNA		
	221	Univ of Calif - Santa Cruz				DNA				DNA				DNA				DNA	DNA		
	222	Univ of Ontario Institute of Tech				DNA				DNA				DNA				DNA	DNA		
	224	San Diego State Univ				DNA				DNA				DNA				DNA	DNA		
	228	Univ of Utah				DNA				DNA				DNA				DNA	DNA		
	229	California Institute of Technology				DNA				DNA				DNA				DNA	DNA		
	230	Montreal Polytechnique				DNA				DNA				DNA				DNA	DNA		
	231	Univ of Texas - San Antonio				DNA				DNA				DNA				DNA	DNA		
	232	Univ of Manitoba				DNF				DNA				DNA				DNA	DNA		
	233	San Jose State University				DNA				DNA				DNA				DNA	DNA		

Endurance Event Results

Electric 2018

Minimum Time (seconds) 1732.903
 Maximum Time (seconds) 2512.710 145%

2 20 sec

Place	Car Num	Team	Time	Laps	Cones	Off Course	Other Penalty	Adjusted Time	Endurance Score
1	205	Univ of Washington	1732.903	16				1732.903	275
2	223	Carnegie Mellon Univ	1805.583	16	3			1811.583	240.0
3	234	McGill Univ	2068.090	16				2068.090	144.4
4	217	Georgia Institute of Technology	2130.764	16	3		5	2141.764	121.2
5	208	Univ of Wisconsin - Madison	2419.098	16				2419.098	46
	232	Univ of Manitoba	1274.059	9		1	30	DNF	9
	230	Montreal Polytechnique	1184.812	8				DNF	8
	225	Purdue Univ - W Lafayette	94.683	1		1		DNF	1
	201	Univ of Pennsylvania	0.000	0				DNF	
	202	Massachusetts Inst of Tech	1618.989	16			15	DQ	

Electric 2018

Efficiency Results

Minimum: 108.306 sec
 Maximum: 157.044 sec
 145%

0.0936 kg
 0.8259 kg
 = 13.213 / 16

0.079 T exp: 1
 0.731 E exp: 1

Place	Car Num	Team	Average Adjusted Laptime	Laps Completed	Fuel Used (units)	Adjusted Energy (kg)	Average Adjusted Energy per Lap	Fuel Type	Fuel Efficiency Factor	Fuel Efficiency Score
1	230	Montreal Polytechnique	148.102	8	1.153	0.749	0.0936	EV	0.731	100
2	217	Georgia Institute of Technology	133.860	16	3.045	1.979	0.1237	EV	0.612	97.6
3	208	Univ of Wisconsin - Madison	151.194	16	2.850	1.852	0.1158	EV	0.579	96.8
4	234	McGill Univ	129.256	16	3.345	2.174	0.1359	EV	0.577	96.8
5	232	Univ of Manitoba	147.118	9	1.865	1.212	0.1347	EV	0.512	94.8
6	223	Carnegie Mellon Univ	113.224	16	4.776	3.104	0.1940	EV	0.462	92.9
7	205	Univ of Washington	108.306	16	5.401	3.510	0.2194	EV	0.427	91.4
8	202	Massachusetts Inst of Tech	102.124	16	6.236	4.053	0.2533	EV	0.392	0

Electric 2018

Team Information

Car Num	Team	Country	Weight (kg)	Weight (lbs)
201	Univ of Pennsylvania	US	185.5	409
202	Massachusetts Inst of Tech	US	230.9	509
203	Universidade Estadual de Campinas	BR	195.0	430
204	Missouri University of Science and Tech	US	224.5	495
205	Univ of Washington	US	171.9	379
206	Univ of Calif - Davis	US	210.0	463
207	Virginia Tech	US		
208	Univ of Wisconsin - Madison	US	205.9	454
209	California Polytechnic State Univ-SLO	US	215.9	476
210	Univ of Kansas - Lawrence	US		
213	Univ of Calif - Irvine	US	285.8	630
214	Kookmin Univ	KR	232.2	512
215	Univ of Akron	US		
216	Florida Inst of Tech	US		
217	Georgia Institute of Technology	US	191.4	422
218	Univ of Waterloo	CA		
219	Univ of Texas - Austin	US	241.8	533
220	Univ of Illinois - Urbana Champaign	US	234.1	516
221	Univ of Calif - Santa Cruz	US		
222	Univ of Ontario Institute of Tech	CA		
223	Carnegie Mellon Univ	US	224.5	495
224	San Diego State Univ	US		
225	Purdue Univ - W Lafayette	US	225.0	496
228	Univ of Utah	US		
229	California Institute of Technology	US	165.6	365
230	Montreal Polytechnique	CA	188.2	415
231	Univ of Texas - San Antonio	US	177.8	392
232	Univ of Manitoba	CA	264.9	584
233	San Jose State University	US	235.4	519
234	McGill Univ	CA	193.2	426

**Formula SAE Electric 2018
Endurance Event Laptimes**

School	Car	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Massachusetts Inst of Tech	202	107.189	98.061	98.677	93.608	92.051	91.090	101.445	106.976		111.895	106.318	106.853	97.338	104.487	97.328	102.519	103.154
Univ of Washington	205	126.304	119.222	98.544	112.051	102.191	95.376	102.395	110.555		109.489	103.024	119.893	104.492	117.936	103.340	103.820	104.271
Univ of Wisconsin - Madison	208	166.020	234.637	152.233	146.564	144.161	141.759	138.826	140.213		186.635	170.333	138.596	135.279	123.047	124.162	132.924	143.709
Georgia Institute of Technology	217	132.380	119.814	117.464	118.901	130.495	124.391	121.223	126.500		149.942	140.711	131.730	147.203	141.638	147.663	141.431	139.278
Carnegie Mellon Univ	223	108.924	109.169	110.314	112.265	111.710	110.981	103.737	107.218		109.753	133.167	111.495	118.879	114.136	114.930	110.559	118.346
Purdue Univ - W Lafayette	225	94.683																
Montreal Polytechnique	230	149.570	146.193	152.813	155.623	147.603	141.406	144.651	146.953									
Univ of Manitoba	232	142.139	133.010	147.109	152.039	136.676	138.338	143.725	148.949		132.074							
McGill Univ	234	123.349	100.004	126.838	103.651	105.193	103.960	114.300	113.077		109.805	267.929	133.808	120.740	127.933	132.558	145.165	139.780

Times eliminated for Driver Changes or black flags

Individual laptimes are provided for information purposes only.

Laptimes are taken from the either the Formula SAE Endurance timing system or manual timing logs.

These individual laptimes have not been corrected for cone or off course penalties, and may or may not include time spent in black flag, if applicable.

The individual laptimes are not critical, the Formula SAE Endurance event is scored based on the time to complete all specified laps of the Endurance event, plus penalties and applicable black flag time