

**2024 ASABE 1/4 SCALE TRACTOR STUDENT DESIGN COMPETITION - WRITTEN DESIGN RAW SCORES**

** These are the raw points for the individual teams prior to normalization (summing these scores will NOT equate to the score in the overall table).	CRITERIA & OBJECTIVES	FORMAT	DESIGN DETAILS	TESTING & DEVELOPMENT	DESIGN LOG	JUDGES DISCRETION	COST STRATEGY	COST ANALYSIS
	5	15	270	70	20	20	50	50
Cal Poly State University	2.67	6.7	123.3	5.0	8.3	8.7	10.0	18.0
Iowa State University	4.33	14.0	234.3	51.0	20.0	19.3	45.7	46.0
Kansas State University	4.67	14.3	225.0	60.0	19.0	19.0	42.0	46.7
McGill University	4.00	9.7	178.3	33.3	0.0	10.7	0.0	0.0
North Carolina State University	4.67	13.7	211.7	57.3	15.3	15.7	32.7	38.3
North Dakota State University	4.33	12.3	200.0	51.7	14.0	16.7	30.0	40.0
Oklahoma State University	5.00	0.0	215.0	40.0	16.0	11.7	45.3	46.7
Penn State University	5.00	14.0	211.7	40.0	15.3	18.0	23.7	40.0
Purdue University	5.00	13.3	228.3	66.7	17.0	16.7	37.3	33.3
South Dakota State University	5.00	0.0	221.7	60.0	20.0	20.0	45.7	45.7
University of Georgia	5.00	0.0	191.7	46.7	18.3	13.0	9.7	19.3
University of Guelph	3.33	10.7	125.0	13.3	0.0	8.3	0.0	0.0
University of Illinois	4.67	13.3	208.3	65.0	18.3	17.0	32.3	35.3
University of Kentucky	4.33	14.3	208.3	50.0	13.3	12.7	36.0	39.3
University of Manitoba	4.67	0.0	206.7	53.3	19.0	18.3	37.7	41.3
University of Missouri	5.00	12.7	228.3	61.7	12.0	14.7	39.3	39.0
University of Nebraska	5.00	12.3	221.7	66.0	0.0	13.0	0.5	7.2
University of Saskatchewan	4.00	0.0	241.7	55.7	19.3	19.3	45.0	42.3
University of Tennessee - Martin	3.67	10.0	140.0	31.7	7.7	8.7	19.0	17.7
University of Wisconsin Madison	5.00	0.0	210.0	45.0	15.0	13.3	36.7	41.3
University of Wisconsin Platteville	5.00	13.0	185.0	33.3	0.0	10.7	22.3	15.7

## 2024 ASABE 1/4 SCALE TRACTOR STUDENT DESIGN COMPETITION - DEFENSE OF DESIGN RAW SCORES

70 pts Max Score for each section

** These are the raw points for the individual teams prior to normalization (summing these scores will NOT equate to the score in the overall table).	DESIGN GOAL	DESIGN CONSIDERATIONS	CONSIDERATION OF COMPANY / PROJECT LIMITATIONS	DATA DRIVEN DECISIONS
Cal Poly State University	0.0	0.0	0.0	0.0
Iowa State University	17.5	18.0	13.5	13.0
Kansas State University	16.0	16.5	11.5	10.5
McGill University	0.0	0.0	0.0	0.0
North Carolina State University	14.0	15.5	13.0	12.5
North Dakota State University	16.5	14.0	12.0	11.5
Oklahoma State University	16.5	16.5	10.5	12.5
Penn State University	16.0	16.5	12.5	12.0
Purdue University	16.5	17.0	12.5	11.5
South Dakota State University	17.5	16.5	13.5	14.5
University of Georgia	12.5	14.0	11.0	10.5
University of Guelph	0.0	0.0	0.0	0.0
University of Illinois	16.5	15.5	14.0	12.5
University of Kentucky	17.0	18.0	14.0	13.0
University of Manitoba	14.0	15.5	13.0	10.5
University of Missouri	15.0	16.0	13.0	11.5
University of Nebraska	0.0	0.0	0.0	0.0
University of Saskatchewan	17.0	17.5	12.5	12.5
University of Tennessee - Martin	15.0	14.5	12.5	11.0
University of Wisconsin Madison	17.0	17.5	12.5	13.0
University of Wisconsin Platteville	15.5	16.0	10.5	10.0

## 2024 ASABE 1/4 SCALE TRACTOR STUDENT DESIGN COMPETITION - DESIGN JUDGING RAW SCORES

	70 pts Max Score for each section				
** These are the raw points for the individual teams prior to normalization (summing these scores will NOT equate to the score in the overall table).	SERVICEABILITY	MANUFACTURABILITY	SAFETY	ERGONOMICS	TEST & DEVELOPMENT
Cal Poly State University	26.2	44.4	43.2	30.4	38.0
Iowa State University	59.2	59.4	59.6	38.4	60.2
Kansas State University	33.4	56.2	54.0	45.2	57.2
McGill University	43.0	38.4	51.2	48.0	29.5
North Carolina State University	48.4	53.4	52.2	55.4	60.3
North Dakota State University	36.2	47.0	51.8	48.0	35.5
Oklahoma State University	38.2	45.6	26.4	39.4	36.2
Penn State University	32.0	40.4	47.8	33.2	29.5
Purdue University	59.8	55.6	65.4	53.8	63.2
South Dakota State University	56.2	63.6	61.2	57.2	60.8
University of Georgia	40.0	43.0	52.4	43.8	35.0
University of Guelph	24.8	29.0	42.8	26.2	25.5
University of Illinois	41.6	44.4	49.0	35.6	44.0
University of Kentucky	57.6	54.6	65.6	56.0	52.3
University of Manitoba	37.6	42.0	49.6	38.2	43.7
University of Missouri	40.4	56.0	59.0	57.0	50.3
University of Nebraska	44.6	44.6	48.6	47.2	57.5
University of Saskatchewan	52.4	61.0	62.4	55.4	57.2
University of Tennessee - Martin	35.0	43.0	57.6	40.0	51.7
University of Wisconsin Madison	52.6	58.8	53.8	54.0	48.2
University of Wisconsin Platteville	37.2	47.0	54.2	46.8	35.5

## 2024 ASABE 1/4 SCALE TRACTOR STUDENT DESIGN COMPETITION - TRACTOR PULL SCORES

200 pts Max Score for each hook	Hook 1 - 1000 lbs	Hook 2 - 1500 lbs	Hook 3 - 1500 lbs
<b>Cal Poly State University</b>	<b>0.0</b>	<b>103.1</b>	<b>42.3</b>
<b>Iowa State University</b>	<b>137.2</b>	<b>75.0</b>	<b>156.1</b>
<b>Kansas State University</b>	<b>144.0</b>	<b>152.4</b>	<b>156.8</b>
<b>McGill University</b>	<b>118.4</b>	<b>74.5</b>	<b>4.2</b>
<b>North Carolina State University</b>	<b>185.3</b>	<b>159.2</b>	<b>184.6</b>
<b>North Dakota State University</b>	<b>173.4</b>	<b>147.5</b>	<b>152.4</b>
<b>Oklahoma State University</b>	<b>0.0</b>	<b>54.8</b>	<b>117.6</b>
<b>Penn State University</b>	<b>172.1</b>	<b>152.6</b>	<b>147.8</b>
<b>Purdue University</b>	<b>189.6</b>	<b>169.3</b>	<b>161.7</b>
<b>South Dakota State University</b>	<b>186.0</b>	<b>168.8</b>	<b>160.2</b>
<b>University of Georgia</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>University of Guelph</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>University of Illinois</b>	<b>119.6</b>	<b>90.4</b>	<b>156.8</b>
<b>University of Kentucky</b>	<b>200.0</b>	<b>200.0</b>	<b>200.0</b>
<b>University of Manitoba</b>	<b>149.5</b>	<b>0.5</b>	<b>2.2</b>
<b>University of Missouri</b>	<b>190.2</b>	<b>187.4</b>	<b>163.4</b>
<b>University of Nebraska</b>	<b>143.1</b>	<b>139.8</b>	<b>157.6</b>
<b>University of Saskatchewan</b>	<b>11.0</b>	<b>36.4</b>	<b>18.5</b>
<b>University of Tennessee - Martin</b>	<b>180.4</b>	<b>115.6</b>	<b>163.0</b>
<b>University of Wisconsin Madison</b>	<b>183.2</b>	<b>166.9</b>	<b>144.1</b>
<b>University of Wisconsin Platteville</b>	<b>180.7</b>	<b>118.7</b>	<b>79.2</b>