Score Tabulation Instructions

Note: You do NOT need these instructions if you are using the electronic version of the engineering presentation score sheet.

The formulas are already set up for you within Excel

Contents	Tables 1-3
	Score Tabulation Sheet (Table 4)

TECHNICAL DOCUMENTATION JUDGING INSTRUCTIONS

Please use these instructions if you are using hard copies of the presentation score sheets

You will need:	Judges' Score Sheet

Step 1: Tabulate Category Scores (for each category)

Add the points within each category to get the **Category Raw Total** (document in first column of Table 4)

Use the **Category Raw Total** and the **Raw Points Possible** (Table 1) to look up the **Raw Category %** (Table 2)

Use the **Raw Category %** and the **Category Weight** (Table 1) to look up the **Category Score** (Table 3)

Record **Category Score** (Table 4)

Step 2: Calculate Final Score (Table 4)

Total Score = Sum of the Category Scores

Final Score = Sum + Discretionary Points - Deduction Points

Printing Instructions:

Instructions (pg. 1)	8.5 x 11 Single Sided
Table 1 & 4 (pg. 2)	8.5 x 11 Single Sided (Both tables fit on one page)
Tables 2 (pg. 3-4)	8.5 x 11 Double Sided
Tables 3 (pg. 5-6)	11 x 17 Double Sided

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Table 1: Category Scoring Info

Category	Raw Points Possible	Category Weight
Overall Presentation	60	20%
Teamwork	20	10%
Design Rationale	44	30%
SID	12	5%
Safety	16	10%
Critical Analysis	32	10%
Future Improvements	4	5%
Accounting	24	10%
Total	212	100%

Table 4: Recording the Category Score and Tabulating the Final Score

Category	Raw Score	Category Score	
Overall Presentation			Tabulate using tables and judges' scores
Teamwork			
Design Rationale			
SID			
Safety			
Critical Analysis			
Future Improvements			
Accounting			
TOTAL SCORE			Add Category Scores
Discretionary Points			Enter Discretionary Points from score sheet
Deductions			Enter Deductions from score sheet
Final Score			Add Discretionary points and subtract deductions to arrive at the Final Score

Technical Documentation - Ranger/Explorer
Table 2: Finding the Raw Category %

Category Raw Total (from judge score sheet)	Raw Points Possible (from Table 1)							
	4	8	12	16	24	32	44	60
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.25	0.13	0.08	0.06	0.04	0.03	0.02	0.02
2	0.50	0.25	0.17	0.13	0.08	0.06	0.05	0.03
3	0.75	0.38	0.25	0.19	0.13	0.09	0.07	0.05
4	1.00	0.50	0.33	0.25	0.17	0.13	0.09	0.07
5	-	0.63	0.42	0.31	0.21	0.16	0.11	0.08
6	-	0.75	0.50	0.38	0.25	0.19	0.14	0.10
7	-	0.88	0.58	0.44	0.29	0.22	0.16	0.12
8	-	1.00	0.67	0.50	0.33	0.25	0.18	0.13
9	-	-	0.75	0.56	0.38	0.28	0.20	0.15
10	-	-	0.83	0.63	0.42	0.31	0.23	0.17
11	-	-	0.92	0.69	0.46	0.34	0.25	0.18
12	-	-	1.00	0.75	0.50	0.38	0.27	0.20
13	-	-	-	0.81	0.54	0.41	0.30	0.22
14	-	-	-	0.88	0.58	0.44	0.32	0.23
15	-	-	-	0.94	0.63	0.47	0.34	0.25
16	-	-	-	1.00	0.67	0.50	0.36	0.27
17	-	-	-	-	0.71	0.53	0.39	0.28
18	-	-	-	-	0.75	0.56	0.41	0.30
19	-	-	-	-	0.79	0.59	0.43	0.32
20	-	-	-	-	0.83	0.63	0.45	0.33
21	-	-	-	-	0.88	0.66	0.48	0.35
22	-	-	-	-	0.92	0.69	0.50	0.37
23	-	-	-	-	0.96	0.72	0.52	0.38
24	-	-	-	-	1.00	0.75	0.55	0.40
25	-	-	-	-	-	0.78	0.57	0.42
26	-	-	-	-	-	0.81	0.59	0.43
27	-	-	-	-	-	0.84	0.61	0.45
28	-	-	-	-	-	0.88	0.64	0.47
29	-	-	-	-	-	0.91	0.66	0.48

Technical Documentation - Ranger/Explorer
Table 2: Finding the Raw Category %

Category Raw Total (from judge score sheet)	Raw Points Possible (from Table 1)							
	4	8	12	16	24	32	44	60
30	-	-	-	-	-	0.94	0.68	0.50
31	-	-	-	-	-	0.97	0.70	0.52
32	-	-	-	-	-	1.00	0.73	0.53
33	-	-	-	-	-	-	0.75	0.55
34	-	-	-	-	-	-	0.77	0.57
35	-	-	-	-	-	-	0.80	0.58
36	-	-	-	-	-	-	0.82	0.60
37	-	-	-	-	-	-	0.84	0.62
38	-	-	-	-	-	-	0.86	0.63
39	-	-	-	-	-	-	0.89	0.65
40	-	-	-	-	-	-	0.91	0.67
41	-	-	-	-	-	-	0.93	0.68
42	-	-	-	-	-	-	0.95	0.70
43	-	-	-	-	-	-	0.98	0.72
44	-	-	-	-	-	-	1.00	0.73
45	-	-	-	-	-	-	-	0.75
46	-	-	-	-	-	-	-	0.77
47	-	-	-	-	-	-	-	0.78
48	-	-	-	-	-	-	-	0.80
49	-	-	-	-	-	-	-	0.82
50	-	-	-	-	-	-	-	0.83
51	-	-	-	-	-	-	-	0.85
52	-	-	-	-	-	-	-	0.87
53	-	-	-	-	-	-	-	0.88
54	-	-	-	-	-	-	-	0.90
55	-	-	-	-	-	-	-	0.92
56	-	-	-	-	-	-	-	0.93
57	-	-	-	-	-	-	-	0.95
58	-	-	-	-	-	-	-	0.97
59	-	-	-	-	-	-	-	0.98
60	-	-	-	-	-	-	-	1.00

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Table 3: Finding the Category Score

Raw Category % (from table 2)	Category Weight (from table 1)			
	5%	10%	20%	30%
0.01	0	0	0	0
0.02	0	0	0	1
0.03	0	0	1	1
0.04	0	0	1	1
0.05	0	1	1	2
0.06	0	1	1	2
0.07	0	1	1	2
0.08	0	1	2	2
0.09	0	1	2	3
0.10	1	1	2	3
0.11	1	1	2	3
0.12	1	1	2	4
0.13	1	1	3	4
0.14	1	1	3	4
0.15	1	2	3	5
0.16	1	2	3	5
0.17	1	2	3	5
0.18	1	2	4	5
0.19	1	2	4	6
0.20	1	2	4	6
0.21	1	2	4	6
0.22	1	2	4	7
0.23	1	2	5	7
0.24	1	2	5	7
0.25	1	3	5	8
0.26	1	3	5	8
0.27	1	3	5	8
0.28	1	3	6	8
0.29	1	3	6	9
0.30	2	3	6	9
0.31	2	3	6	9
0.32	2	3	6	10
0.33	2	3	7	10
0.34	2	3	7	10
0.35	2	4	7	11
0.36	2	4	7	11
0.37	2	4	7	11
0.38	2	4	8	11
0.39	2	4	8	12
0.40	2	4	8	12
0.41	2	4	8	12
0.42	2	4	8	13
0.43	2	4	9	13
0.44	2	4	9	13
0.45	2	5	9	14
0.46	2	5	9	14
0.47	2	5	9	14
0.48	2	5	10	14
0.49	2	5	10	15
0.50	3	5	10	15
0.51	3	5	10	15
0.52	3	5	10	16
0.53	3	5	11	16

Technical Documentation - Ranger/Explorer
Table 3: Finding the Category Score

Raw Category % (from table 2)	Category Weight (from table 1)			
	5%	10%	20%	30%
0.54	3	5	11	16
0.55	3	6	11	17
0.56	3	6	11	17
0.57	3	6	11	17
0.58	3	6	12	17
0.59	3	6	12	18
0.60	3	6	12	18
0.61	3	6	12	18
0.62	3	6	12	19
0.63	3	6	13	19
0.64	3	6	13	19
0.65	3	7	13	20
0.66	3	7	13	20
0.67	3	7	13	20
0.68	3	7	14	20
0.69	3	7	14	21
0.70	4	7	14	21
0.71	4	7	14	21
0.72	4	7	14	22
0.73	4	7	15	22
0.74	4	7	15	22
0.75	4	8	15	23
0.76	4	8	15	23
0.77	4	8	15	23
0.78	4	8	16	23
0.79	4	8	16	24
0.80	4	8	16	24
0.81	4	8	16	24
0.82	4	8	16	25
0.83	4	8	17	25
0.84	4	8	17	25
0.85	4	9	17	26
0.86	4	9	17	26
0.87	4	9	17	26
0.88	4	9	18	26
0.89	4	9	18	27
0.90	5	9	18	27
0.91	5	9	18	27
0.92	5	9	18	28
0.93	5	9	19	28
0.94	5	9	19	28
0.95	5	10	19	29
0.96	5	10	19	29
0.97	5	10	19	29
0.98	5	10	20	29
0.99	5	10	20	30
1.00	5	10	20	30