### **Engineering Professional Responsibility Assessment Pre-**

### **Definitions:**

*Community Service* is voluntary work intended to help people in a particular community.

Social Responsibility is an obligation that an individual (or company) has to act with concern and sensitivity, aware of the impacts of their action on others, particularly the disadvantaged.

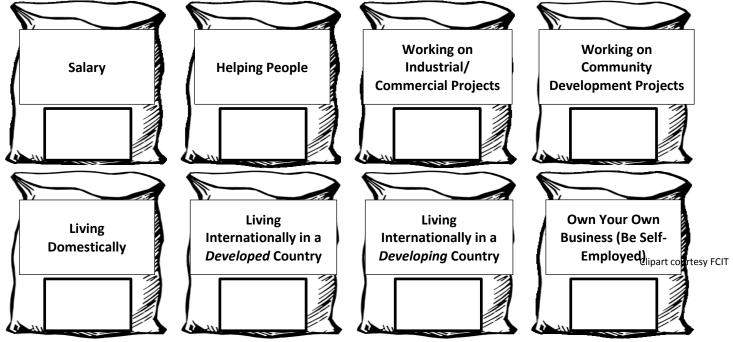
Social Justice relates to the distribution of the advantages and disadvantages in society, including the way in which they are allocated.

pro bono - Work done without compensation (pay) for the public good

Please rate how important the following skills are for a professional engineer using the following scale:

1	2	3	4	5		6			7		
Very Unimportar	t Unimportant	Slightly Unimportant	Neutral	Slightly Important	Ir	Important		Ir	Very Important		_
Fundamental Skills (i.e. Math & Science)							3	4	5	6	7
<b>Technical Skills</b> (i.e. Conducting Experiments, Data Analysis, Design, Engineering Tools, & Problem Solving)						2	3	4	5	6	7
Business Skills (i.e. Business Knowledge, Management Skills & Professionalism)						2	3	4	5	6	7
Professior	<b>Professional Skills</b> (i.e. Communication, Contemporary Issues, Creativity, Leadership, Life-Long Learning, & Teamwork)						3	4	5	6	7
Cultural Aware	<b>Cultural Awareness/Understanding</b> ( <i>i.e.</i> of your culture, and those of others)						3	4	5	6	7
<b>Ethics</b> (i.e. ensuring all of your work follows professional codes of conduct)					1	2	3	4	5	6	7
Societal C	etal Context (i.e. how your work connects to society and vice versa)					2	3	4	5	6	7
	Voluntee	e <b>rism</b> (for profes	sional and pers	onal reasons)	1	2	3	4	5	6	7

**Future Job Qualities:** Below there are 8 bins with different job qualities on them. You have 10 stones to distribute among the bins to mark which qualities are important to you when thinking of your future engineering job. You may place multiple stones in any bin, but you must place exactly 10 stones in total and no fractional stone distributions are allowed. Write your number of stones in the square on each bin.



EPRA survey, developed by Nathan Canney and Angela Bielefeldt as part of NSF grant #1158863

Rate the level to	which you ag	gree/disagree	with the foll	owing stateme	nts using the f	ollowing scale:
1			A			

1	1 2 3 4			5		6		7			
					Slightly	/	Agree		Strongly		
Disagree Disagree Disagree A					Agree		Ag	ee	A	lgree	
Engineers ha	ve contributed	greatly to fixin	g problems in t	he							
0		<b>.</b> ,	WO		1	2	3	4	5	6	7
I would <i>not</i> change my engineering design because it conflicted											
with community feedback					1	2	3	4	5	6	7
Volunteer ex	perience(s) hav	e changed the	way I think abo	ut	4	2	2	4	-	C	7
		-	spending mon	ey	1	2	3	4	5	6	7
It is important	to me persona	lly to have a ca			1	2	3	4	5	6	7
			helping peop		-	2	5	-	5	U	,
Engineering	skills are not us	seful in making		-	1	2	3	4	5	6	7
It is important	for ongineers t	o consider the	better pla								
it is important	for engineers t		tions to problem		1	2	3	4	5	6	7
Service sho	ould <i>not</i> be an e		•								
			professi	-	1	2	3	4	5	6	7
I would be w	villing to have a	career that ear	rns less money i	if I	1	h	2	Λ	-	c	7
		we	re serving socie	ety	1	2	3	4	5	6	7
		-	ing to help othe		1	2	3	4	5	6	7
I view engineerir	-	•			1	2	3	4	5	6	7
	feel called to s			_	1	2	3	4	5	6	7
The needs of society have no affect on my choice to pursue					1	2	3	4	5	6	7
engineering as a career											
It is important to incorporate societal constraints into engineering decisions					1	2	3	4	5	6	7
Technology doe	es <i>not</i> play an in	-	-								
			problei	-	1	2	3	4	5	6	7
My engineering	skills are streng	gthened throug	h participation	in	1	r	2	4	5	6	7
	е	ngineering serv	vice opportuniti	ies	1	2	3	4	Э	0	/
I feel call	ed by the need	s of society to <b>p</b>			1	2	3	4	5	6	7
			engineeri	-							
	ering firms sho				1	2	3	4	5	6	7
	olunteer work v	vill ever have m	nuch affect on r care	-	1	2	3	4	5	6	7
I think it is in	mportant to use	e my engineerir			1	2	3	4	5	6	7
	Engineers can h		-		1	2	3	4	5	6	7
Knowing that my	•	•	•								
· · ·		• •	sonal satisfacti		1	2	3	4	5	6	7
Engineers should use their skills to solve social problems					1	2	3	4	5	6	7
It is important to use my engineering abilities to provide a useful					1	2	3	4	5	6	7
			to the commun					•		, in the second s	
I believe that I wi	III be involved in	n social justice i			1	2	3	4	5	6	7
I do not thin	k it is importan	t to use engine	of my l ering to serve t								
		-	eater commun		1	2	3	4	5	6	7
I believe my life	e will be positiv	-			1	2	3	4	5	6	7
		,		5		-	-	•	-	-	

EPRA survey, developed by Nathan Canney and Angela Bielefeldt as part of NSF grant #1158863

			that I									
Rate the level to			1		emen	ts us	•	e fol		•	le:	
1	2	3	4	5			6		7			
Strongly	Disagree	Slightly	Neutral	Slightl	Δστρρ				Strongly			
Disagree	Disagree	Disagree	neathai	Agree Agree		3 4 3 4		Agı	ree			
	2		4	5	6	7						
	There are <i>not</i> c			•	1	2	3	4	5	6	7	
I think people who are more fortunate in life should help less							3	4	5	6	7	
		• •	eir needs and p		1	2		-			,	
	extra time spei		•		1	2	3	4	5	6	7	
-	esponsibility to	-			1	2	3	4	5	6	7	
	es more than t	•	•									
change social pro	blems: we also	need to work	•		1	2	3	4	5	6	7	
or global level												
			ty groups need	-	1	2	3	4	5	6	7	
	here are <i>not</i> pe	•	•	-	1	2	3	4	5	6	7	
I can have an impact on solving problems that face my local						2	3	4	5	6	7	
community						-	5	•	5	Ŭ	•	
It is important				•	1	2	3	4	5	6	7	
through participating in community service												
		-	re reading this	•	1	2	3	4	5	6	7	
It is my respo	onsibility to take	e some real me	asures to help	others in	1	2	3	4	5	6	7	
				need								
			to contribute t	-	1	2	3	4	5	6	7	
The people	who benefit fro	om my voluntee			1	2	3	4	5	6	7	
			anything to									
	e are people wh			_	1	2	3	4	5	6	7	
	My contributio				1	2	3	4	5	6	7	
I believe that the				-	1	2	3	4	5	6	7	
I think I shoul	d help people v	vho are less for		eir needs problems	1	2	3	4	5	6	7	
L cannot have	an impact on s	olving problem										
i cumot nave	an impact on s				1	2	3	4	5	6	7	
Lom starting to	realize that me		nunities intern	-								
I am starting to		•	-		1	2	3	4	5	6	7	
band	l aids" over soc	•		-	1	ſ	2	Δ	Г	G	7	
		i nere are r	needs in the co	mmunity	1	2	3	4	5	6	7	

Rate the frequency that you have engaged in any of the following community service activities <u>since</u> <u>beginning college</u>, using the following rating scale [or <u>before coming to college</u> if you are an incoming first year student]:

,	0	1	2	3		4			5	
		1	More t		han	-			5	
	Have not	Once				Monthly		Weekly		
	Participated	Onee	TWICE		routinely		citiy	WCCKIY		
	Habitat for Humanity Build					1	2	3	4	5
Tutoring elementary or secondary children						1	2	3	4	5
Tutoring elementary or secondary children Tutoring college students (unpaid)					0	1	2	3	4	5
		Tutoning	-	ed Blood	0	1	2	3	4	5
In (	Class Service Learn	ing Project (i.e.			0	±	2	J	4	5
		ing Froject (i.e. s	Service Orienteu (	project)	0	1	2	3	4	5
Engi	neers without Bor	dors (EM/B) or Er	ginoars for a Su	• • •						
LIIGI	neers without boi		World (ESW		0	1	2	3	4	5
Shou	rt term on-site ser	vice project (i.e.								
51101	it term on-site ser		VB/ESW in-count	-	0	1	2	3		
		LV	Disaster Relief V		0	1	2	3		
		International	Humanitarian Vo		0	±	2	5		
		(Specify)		Junteer.	0	1	2	3		
		(Specify)	Food Bank V	olunteer	0	1	2	3	4	5
	Meals on Wheels Volunteer					1	2	3	4	5
	Nursing Home Volunteer					1	2	3	4	5
Political Campaign Volunteer					0	1	2	3	4	5
	Big Brother/Big Sister, Boys & Girls Club, Boy/Girl Scouts					1	2	3	4	5
						1	2	3	4	5
	Soup Kitchen Volunteer Other:					1	2	3	4	5
		Other			0	T	Z	3	4	5

## If you were to volunteer, or have volunteered with an organization since coming to college, please specify why you would/did (check all that apply):

- □ Required for class
- □ I went with a friend
- Because of my religious beliefs
- Makes me feel good
- □ To help others
- □ With my Fraternity/Sorority

- To gain new skillsTo meet new people
- To build my resume
- □ For an international experience (to travel)

Other:\_\_\_\_\_

# Are there factors that currently or have previously limited/inhibited your participation in volunteer activities (check all that apply):

- Lack of time due to course work
- □ Lack of time due to extracurricular activities
- □ Lack of time due to work obligations
- □ Family obligations
- Health restrictions
- □ Don't know where to volunteer/how to be
- □ Not interested in volunteering
- □ My friends do not participate in volunteer activities
- □ Previous negative experience(s) with volunteering
- Financial limitations
- None
- Other:\_\_\_\_\_

EPRA survey, developed by Nathan Canney and Angela Bielefeldt as part of NSF grant #1158863

#### connected with a volunteer opportunity

Briefly describe any events that have influenced your views of community service and social responsibility.

Would you be willing to be contacted to participate in an hour long	Yes	Νο	

Would you be willing to be contacted to participate in an hour longYesfollow-up interview related to this research and survey results?Yes

### **Demographic Information**

Gender	Male Female							
Age:	<18	18-20		21-23		28	>28	
Engineering Major or intended major:	Civil Other:	Environm	nental		Mechanio	cal	Open	
College rank:	Freshman	Sopho	omore	Junior	Senior	Gra	duate	
Cumulative GPA:	<2.5	2.5	-3.0	3.0	)-3.5		3.5-4.0	
Race or ethnicity:	African America	n		Hispanic			Asian	
	Native American		Non-	Hispanic W	c White Multiracial			
	Other:							
Previous Engineering Work Experience:	None		ummer or F nternship/			ll Time E <sup>-</sup> or	mployment: year(s)	
Are you in the first generation of your family to attend college?	Ŷ	es				No		
How would you describe your religious preference?	Religious, affiliated organized religior Christian, Muslim, J Hindu, Buddhist,	n (i.e. Iewish,	affiliat organize	ual but not ed with an d religion (i Agnostic, e	.e. 4	Atheist	Indifferent or not religious	
[if religious checked above] How active do you consider yourself in the practice of your religious preference?	Very active S	omewhat active	Not ve	ry active	Not act	ive	Does not apply/Prefer not to say	

EPRA survey, developed by Nathan Canney and Angela Bielefeldt as part of NSF grant #1158863