

May 2020 Graduate Future Plans Survey College of Engineering Summary Report

This report presents summary results from the May 2020 Graduate Future Plans Survey for departments and types of degree programs in the College of Engineering, followed by summary information on employment and further education for the college as a whole.

Highlights for the College of Engineering

- 69% of the doctoral and master's students in COE graduating in spring 2020 responded to the survey
- 69% of doctoral respondents and 55% of master's respondents in COE report that they have secured full-time employment for the coming year
- COE graduates with full-time employment report an average salary in the coming year of \$99,428 (median = \$102,500)
- 37% of COE graduates with full-time employment will be working in North Carolina (28% in the Research Triangle Area)
- 10% of master's students in COE report that they plan to return to graduate/professional school in the coming year
- 87% of master's students in COE with definite plans to graduate/professional school will be attending a school in North Carolina

Department Summaries

The following tables provide summary statistics for May 2020 graduates in the College of Engineering. Table 1 includes the number of graduate students in the College of Engineering who graduated in May 2020 and the number of those students who submitted the Graduate Future Plans Survey. It also includes the number of students who indicated at the time of the survey that they would be working full-time, as well as the number of those who indicated they were either pursuing or planning to pursue another graduate or professional degree in the coming year. Finally, it includes summary statistics on the self-reported salaries of those who reported that they would be employed full-time. Table 2 and Table 3 provide the same summary statistics for May 2020 graduates in each department in the College of Engineering, for doctoral graduates and master's graduates, respectively.

Table 1: College Summary

College	Survey Population	Survey Respondents	Response Rate	N Full Time Job	N Grad/Prof School*	25th Percentile Salary	Median Salary	75th Percentile Salary	Average Salary	N Reporting Salary
COE Overall	576	395	69%	224	34	82,500	102,500	112,500	99,428	201

Table 2: Department Summaries, Doctoral Degree Recipients

Department	Survey Population	Survey Respondents	Response Rate	N Full Time Job	N Grad/Prof School*	25th Percentile Salary	Median Salary	75th Percentile Salary	Average Salary	N Reporting Salary
Chemical and Biomolecular Engineering	3	3	100%	2	.	**	**	**	**	2
Civil, Construction, and Environmental Engineering	8	7	88%	5	1	52,500	67,500	87,500	69,500	5
Computer Science	6	4	67%	4	.	50,000	82,500	115,000	82,500	4
Edward P. Fitts Industrial & System Engineering	3	3	100%	2	.	**	**	**	**	2
Electrical and Computer Engineering	19	15	79%	13	.	82,500	107,500	132,500	105,000	12
Materials Science and Engineering	9	6	67%	3	.	**	**	**	**	3
Mechanical and Aerospace Engineering	5	3	60%	2	.	**	**	**	**	2
Nuclear Engineering	15	11	73%	5	.	77,500	102,500	107,500	94,500	5
COE Doctoral Degree Recipients Overall	68	52	77%	36	1	67,500	92,500	117,500	92,857	35

*Includes all students planning on going to graduate/professional school in the coming year for another degree, including those who were currently enrolled as of the time of the survey or who have been accepted to graduate/professional school and know where they will be going, as well as those who have been accepted to at least one school but have not yet finalized their plans, those who have applied but have not yet been accepted, and those who have not yet applied but plan to do so

**Statistics on salary information for those departments with fewer than 4 respondents reporting their salary have been excluded from the table.

Table 3: Department Summaries, Master's Degree Recipients

Department	Survey Population	Survey Respondents	Response Rate	N Full Time Job	N Grad/Prof School*	25th Percentile Salary	Median Salary	75th Percentile Salary	Average Salary	N Reporting Salary
Biomedical Engineering	9	6	67%	3	.	**	**	**	**	3
Chemical and Biomolecular Engineering	16	11	69%	3	6	**	**	**	**	2
Civil, Construction, and Environmental Engineering	32	23	72%	10	2	62,500	70,000	97,500	85,000	10
College of Engineering Dean's Office	11	10	91%	9	.	75,000	92,500	97,500	85,625	8
Computer Science	160	112	70%	75	3	102,500	112,500	117,500	108,409	66
Edward P. Fitts Industrial & System Engineering	37	21	57%	5	3	77,500	85,000	95,000	86,250	4
Electrical and Computer Engineering	163	110	68%	66	7	82,500	102,500	117,500	100,424	59
Integrated Manufacturing Systems Engineering	7	4	57%	1	.	**	**	**	**	.
Materials Science and Engineering	12	8	67%	2	6	**	**	**	**	1
Mechanical and Aerospace Engineering	49	29	59%	11	3	72,500	82,500	102,500	86,591	11
Nuclear Engineering	10	7	70%	3	3	**	**	**	**	2
Operations Research	2	2	100%	.	.	**	**	**	**	.
COE Master's Degree Recipients Overall	508	343	68%	188	33	82,500	102,500	112,500	100,813	166

*Includes all students planning on going to graduate/professional school in the coming year for another degree, including those who were currently enrolled as of the time of the survey or who have been accepted to graduate/professional school and know where they will be going, as well as those who have been accepted to at least one school but have not yet finalized their plans, those who have applied but have not yet been accepted, and those who have not yet applied but plan to do so.

**Statistics on salary information for those departments with fewer than 4 respondents reporting their salary have been excluded from the table.

Full-Time Employment (college overall)

Table 4: Name of Company/Organization, Doctoral Degree Recipients

	N
AIR Worldwide	1
Applied Materials	1
Booz Allen Hamilton	1
Cornell University	1
Daymark Energy Advisors	1
Edwards Lifesciences	1
Facebook	1
Frederick National Laboratory for Cancer Research	1
Google	1
Intel	1
Karen Clark & Company	1
Knolls Atomic Power Laboratory	1
Los Alamos National Laboratory	1
Lucideon M+P	1
Marvell Semiconductor	1
MedStar Health Research Institute	1
Microsoft	1
Micross Advanced Interconnect Technology	1
NASCAR Research and Development Center	1
NC State University	7
Pacific Northwest National Laboratory	1
Quanta Technology LLC	1

Table 4: Name of Company/Organization, Doctoral Degree Recipients, *continued*

	N
State Grid Corporation of China	1
United States Army	1
United States Military Academy West Point	1
Unity Technologies	1
VMware	1
Wmch Inc	1
eMagin	1

Table 5: Name of Company/Organization, Master's Degree Recipients

	N
ABB	1
AECOM	1
AKG of America Inc.	1
ARM Inc.	1
Advanced Micro Devices	2
Akamai Technologies	1
Akrobotix	1
Allstate	1
Amazon	27
Amazon Web Services	4
American Tower Corporation	1
Analog Devices Inc.	1
Anewgo	1
Apple	2

Table 5: Name of Company/Organization, Master's Degree Recipients, *continued*

	N
Applied Building Sciences	1
Applied Materials	1
Arauco	1
Arista Networks	1
Audible	1
BAE Systems	1
Bank of America	1
Barclays	1
Bechtel	2
Burns & McDonnell	1
ByteDance	1
Charles Schwab Corporation	1
Cisco Systems	2
Citrix Systems	3
CoVar	1
Cree Inc.	1
Dell EMC	1
Deloitte	1
Department of Defense	1
Dominion Energy	2
Dropworks, Inc.	1
Drye McGlamery Engineering, PLLC	1
Duke Energy	3
EMERGO, by UL	1

Table 5: Name of Company/Organization, Master's Degree Recipients, *continued*

	N
Investnet	1
Environmental Resources Management	1
Epic Systems	1
European Organisation for the Exploitation of Meteorological Satellites	1
Evonik Industries	1
Facebook	3
FoodLogiQ	1
GaffneyCline	1
Garmin Ltd.	1
General Electric	2
General Electric - GE Power	2
Gilbarco Veeder-Root	1
GlaxoSmithKline	1
Goldman Sachs	2
Goodix Technology	1
HCL Technolgies	1
HPE Nimble Storage	1
Hewlett Packard	1
Huntington Ingalls Industries	1
IBM	1
Intel	4
John Deere	1
Kaleido	1
Key Tech, Inc.	1

Table 5: Name of Company/Organization, Master's Degree Recipients, *continued*

	N
LUMEOVA, Inc	2
Laird Thermal Systems	1
Lenovo	1
LexisNexis	3
Lockheed Martin Corporation	1
Los Alamos National Laboratory	1
M.C. Dean, Inc.	1
Marvell Semiconductor	1
McGill Associates	1
Michelin North America, Inc.	1
Microsoft	7
NUVIA Inc	2
NVIDIA	3
Naval Air Systems Command (NAVAIR)	4
NetApp	4
Northrop Grumman	1
Northrop Grumman Space Systems	1
Oracle Co.	2
Pfizer Inc.	2
Purdue University	1
Qualcomm	4
Qualys	1
Red Hat	2
SAS Institute	1

Table 5: Name of Company/Organization, Master's Degree Recipients, *continued*

	N
Sandia National Laboratories	1
Saudi Aramco	1
Sebia Inc	1
Seqirus	1
Signalscape, Inc.	1
Signature Consultants LLC	1
StrideBio, Inc.	1
Synopsys	1
TMEIC	1
Terracon Consultants Inc	1
Texas Instruments	1
TiVo	1
Tresata	1
United States Air Force	1
United States Military Academy West Point	1
United States Navy	1
University of Massachusetts Amherst	1
VMware	2
WSP USA	1
eBay	1

Table 6: Location of Company (state), Doctoral Degree Recipients

	N	%
North Carolina	13	39%
California	5	15%
New York	4	12%
Massachusetts	3	9%
Washington	2	6%
Maryland	2	6%
Oregon	1	3%
Virginia	1	3%
New Mexico	1	3%
District of Columbia	1	3%

Table 7: Location of Company (state), Master's Degree Recipients

	N	%
North Carolina	63	36%
Washington	33	19%
California	19	11%
Texas	11	6%
Virginia	7	4%
Massachusetts	6	3%
Florida	5	3%
Not sure	4	2%
New York	4	2%
Georgia	3	2%
Maryland	3	2%
New Mexico	2	1%
South Carolina	2	1%
New Jersey	2	1%
Not applicable - Working remotely	2	1%
Colorado	1	1%
Oregon	1	1%
Ohio	1	1%
New Hampshire	1	1%
Wisconsin	1	1%
Indiana	1	1%
Arizona	1	1%

Table 8: Region of Company (inside/outside NC Triangle), Doctoral Degree Recipients

	N	%
Other NC	1	3%
Outside NC	22	63%
Triangle	12	34%

Table 9: Region of Company (inside/outside NC Triangle), Master's Degree Recipients

	N	%
Other NC	15	9%
Outside NC	113	64%
Triangle	48	27%

Table 10: Job Title, Doctoral Degree Recipients

	N
Advanced Nuclear Engineer	1
Assistant Research Professor	1
Associate Mobile Applications Engineer	1
Cancer Research Training Award Fellow	1
Commercial Engineer	1
Computer Vision Scientist	1
Development Engineer	1
Engineer I, Research & Modeling	1
Hardware Engineer	1
MTS3 Blockchain Engineer	1
Machine Learning Engineer	1
OLED Scientist	1
Physicist/Scientist	1

Table 10: Job Title, Doctoral Degree Recipients, *continued*

	N
Postdoc	1
Postdoctoral Associate	1
Postdoctoral Research Associate	2
Postdoctoral Research Scholar	3
Postdoctoral Scholar	1
Professor in The Dept. of Mathematics	1
Project Manager	1
Research Fellow	1
Research Scholar	1
Research Scientist	1
Senior Director of Aerodynamics	1
Senior Earthquake Engineer	1
Senior Energy Analyst	1
Senior Engineer	3
Senior Server Architecture Engineer	1
Software Engineer	1
Technology Development Module & Integration Yield Engineer	1

Table 11: Job Title, Master's Degree Recipients

	N
Account Manager	1
Aerospace Engineer	2
Amazon Cloud Support Engineer	1
Analog IC Design Engineer	1
Analyst	1
Applications Engineering Manager	1
Assistant Bridge Engineer	1
Assistant Professor	1
Assistant Structural Engineer	1
Associate Engineer	1
Associate Scientist	1
Associate Software Applications Engineer	1
Availability Support Division Head	1
Avionics Engineer	1
Back-End Engineer	1
Business Analyst	1
CPU Design/Microarchitecture Verification Engineer	1
CPU Verification Engineer	1
Chip Development Engineer in Test	1
Cloud Software Engineer	1
Cloud Support Associate	1
Cognitive Developer	1
Combustion Engineer	1
Composites Manufacturing Engineer	1

Table 11: Job Title, Master's Degree Recipients, *continued*

	N
Computer Engineer	1
Control Engineer	1
Control Systems Engineer	1
Cyber Risk Advisory Analyst	1
Data Engineer	2
Data Science Intern/Co-Op	1
Data Scientist	1
Design Verification Engineer	2
Developer Analyst	1
Electrical Engineer	3
Electrical Engineering Lead	1
Embedded Software Engineer	1
Engineer	3
Engineer 1	1
Engineer I	2
Engineer II	1
Engineering Associate III	1
Engineering Supervisor	1
Executive Officer and F-15E Instructor Pilot	1
Flight Test Engineer	1
Formal Verification Engineer	1
Full Stack Developer	1
Generator Applications Engineer	1
Graphics Engineer	1

Table 11: Job Title, Master's Degree Recipients, *continued*

	N
Human Factors Associate	1
IP Core Verification Engineer	1
Junior Rotating Faculty Member	1
Machine Learning Engineer	1
Manufacturing Engineer	1
Mechanical & Test Engineer	1
Mechanical Design Engineer	1
Member of Technical Staff	4
Member of Technical Staff 2	1
Network Deployment Engineer	1
Network Engineer	1
Nuclear Operator	1
Office Engineer 1 (Testing and Commissioning Engineer)	1
Office Manager	1
Performance Engineer	1
Postdoctoral Researcher	1
Principal Analytical Software Tester	1
Process Engineer	2
Product Engineering Development Program	1
Product Manager	1
Quality Engineer	1
R&D Engineer	1
R&D Engineer II	1
RF IC Design Engineer	2

Table 11: Job Title, Master's Degree Recipients, *continued*

	N
RTL/ Microcontroller Engineer	1
Regional Engineering Manager	1
Research Associate II	1
Reservoir Engineer	1
Robotics Engineer	1
Scientific Software Engineer	1
Senior Associate Scientist	1
Senior Circuit Design Eng.	1
Senior Engineer	3
Senior Hardware Design Engineer	1
Senior R&D S&E Mechanical Engineer	1
Senior Software Engineer	2
Shift Refueling Engineer 3	1
Software Applications Engineer	1
Software Developer	6
Software Developer Engineer	2
Software Developer, Hybrid Cloud	1
Software Development Engineer	18
Software Development Engineer 1	2
Software Development Engineer 3	1
Software Development Engineer I	4
Software Development Engineer New Graduate	1
Software Engineer	20
Software Engineer 1	1

Table 11: Job Title, Master's Degree Recipients, *continued*

	N
Software Engineer 2	5
Software Engineer II	1
Software Engineer in Test	1
Software Tools Infrastructure Architect	1
Staff Engineer	2
Structural Engineer	2
System Software Engineer	1
Systems Engineer	1
Technical Consulting Engineer	1
Technical Services Engineer I	1
Technical Support Engineer	1
Technology Analyst	1
Verification Engineer	1
Verification IP Developer	1
Video Quality Engineer	1

Table 12: Resources Used to Help Get/Locate Job, by Degree Received*

	COE Overall		Doctoral		Masters	
	N	%	N	%	N	%
Internet: LinkedIn	48	50%	6	32%	42	55%
Internship/externship	39	41%	6	32%	33	43%
Campus or college career center	26	27%	3	16%	23	30%
Career fair at NC State	26	27%	1	5%	25	33%
Family/friends/classmates/co-workers	17	18%	2	11%	15	20%
Co-op experience	15	16%	1	5%	14	19%
Applied for job via ePACK	13	14%	1	5%	12	16%
Research assistantship	13	14%	8	42%	5	7%
Optional Practical Training (OPT)	13	14%	4	21%	9	12%
Personal/professional connection(s) within the company	13	14%	2	11%	11	15%
Consultation w/NC State Career Counselor/Coach	11	12%	1	5%	10	13%
On-campus interviewing	11	12%	1	5%	10	13%
NC State faculty member	11	12%	8	42%	3	4%
Internet (Other)	10	11%	0	0%	10	13%
Professional association (members, conferences, publications, etc.)	8	9%	3	16%	5	7%
Teaching assistantship	7	7%	2	11%	5	7%
Employer info session on campus	5	5%	0	0%	5	7%
Employer found resume on ePACK	3	3%	0	0%	3	4%
Career fair off campus	3	3%	1	5%	2	3%
Volunteer work	2	2%	0	0%	2	3%
Student teaching experience	1	1%	0	0%	1	1%
Clinical placement	0	0%	0	0%	0	0%

Table 12: Resources Used to Help Get/Locate Job, by Degree Received*, *continued*

	COE Overall		Doctoral		Masters	
	N	%	N	%	N	%
Staffing agency	0	0%	0	0%	0	0%
Other	3	3%	1	5%	2	3%

*Respondents could select more than one resource.

**Question was asked of those who indicated they would be employed full-time in a position they had obtained during their graduate program or at the time of graduation (i.e., excluding those who said they would be employed in a position they had obtained prior to beginning their graduate program).

Further Education (college overall)

Table 13: Status for Further Graduate/Professional School Attendance, Master's Degree Recipients (among those planning to attend)

	N	%
Am already enrolled and pursuing the degree	19	58%
Have applied, but not yet been accepted	1	3%
Have been accepted and know where I'm going	5	15%
Have been accepted but undecided	3	9%
Have not applied but plan to do so within the next year	5	15%

Information provided in the tables below is collected and reported only for respondents who indicated that at the time of the survey they had been accepted to graduate/professional school to pursue another degree and were currently enrolled or knew where they would be going.

Table 14: Name of Graduate/Professional School Students Will be Attending, Master's Degree Recipients

	N
Georgia Institute of Technology	1
NC State University	20
University of California, San Diego	1
University of Maryland at College Park	1

Table 15: Location of Graduate/Professional School Students Will be Attending, Master's Degree Recipients

	N	%
North Carolina	20	87%
Georgia	1	4%
California	1	4%
Maryland	1	4%

Table 16: Type of Degree Pursuing, Master's Degree Recipients*

	N	%
Master's	1	4%
Doctoral	22	92%
Professional	0	0%
Other	0	0%

*Respondents could select more than one degree.

Table 17: Master's Degree Pursuing, Master's Degree Recipients

	N
MS	1

Table 18: Doctoral Degree Pursuing, Master's Degree Recipients

	N
PhD	22

Table 19: Academic Program, Master's Recipients*

	N
Analytics	1
Chemical Engineering	1
Chemical and Biomolecular Engineering	3
Civil, Environmental, and Construction Engineering / Construction Engineering	1
Computer Science	1
Electrical Engineering	3
Electrical and Computer Engineering	1
Engineering	1
Industrial and Systems Engineering	1
Materials Science and Engineering	1
Mechanical Engineering	2
Mechanical and Aerospace Engineering	1
Nanoengineering	1
Nuclear Engineering	4
Operations Research	1

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