

## **May 2019 Undergraduate Future Plans Survey College of Engineering Summary Report**

This report presents summary results from the May 2019 Undergraduate Future Plans Survey for departments 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**

- 62% of seniors in COE graduating in spring 2019 responded to the survey
- 67% of respondents in COE said they had obtained a full-time position by graduation
- COE graduates with full-time employment (excluding internships) reported an average starting salary of \$67,507 (median = \$68,750)
- 66% of COE graduates with full-time employment said they would be working in North Carolina (48% in the Research Triangle Area)
- 20% of respondents in COE indicated they were planning to go to graduate/professional school in the year after graduation
- 54% of COE graduates with definite plans for graduate/professional school said they would be attending a school in North Carolina

## Department Summaries

The following table provides summary statistics for May 2019 graduates in each of the College of Engineering departments. It includes the number of students in the department who graduated in May 2019 and the number of those students who submitted the Undergraduate Future Plans Survey. It also includes the number of students who indicated that at the time of the survey they had already accepted a full-time position (including military and volunteer work [e.g., Peace Corps]), and the number who indicated they were either attending or planning on attending graduate or professional school in the coming year. Finally, it includes summary statistics on the self-reported salaries of those having accepted full-time employment.

**Table 1: Department Summaries**

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
College of Engineering Dean's Office	35	8	22.9%	8	.	63,750	67,500	71,250	68,125	8
Biomedical Engineering	65	38	58.5%	20	12	53,750	61,250	71,250	59,861	18
Chemical Engineering	106	67	63.2%	43	10	66,250	71,250	73,750	70,625	42
Civil, Construction, and Environmental Engineering	129	81	62.8%	62	17	58,750	61,250	63,750	60,572	59
Computer Science	144	79	54.9%	53	8	68,750	72,500	82,500	76,250	52
Electrical and Computer Engineering	151	142	94.0%	91	34	63,750	71,250	73,750	69,464	84
Fitts Dept of Industrial and Systems Engineering	49	36	73.5%	28	3	66,250	71,250	71,250	69,643	28
Materials Sci & Engr	35	26	74.3%	14	6	65,000	68,750	71,250	70,729	12
Mechanical and Aerospace Engineering	219	108	49.3%	71	26	56,250	66,250	71,250	63,654	65
Nuclear Engineering	31	14	45.2%	10	3	51,250	63,750	71,250	61,250	9
COE Overall	964	599	62.1%	400	119	61,250	68,750	71,250	67,507	377

\*Includes all students planning on going to graduate/professional school in the coming year, including those 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.

## Full-Time Employment (college overall)

Table 2: Name of Company/Organization

	N
3M	1
ABB	2
ABM	1
ARAMCO	1
ATI	2
Accenture	2
AdvanSix	2
Advanced Energy	1
Ajinomoto	1
Alight Solutions	1
Allscripts	2
Allstate	3
Altec	1
Amazon	2
American Airlines	1
American Board of Anesthesiology	1
American Woodmark	1
Anduril	1
Apple Inc.	1
Arconic	1
Arista Networks	1
Avantor	1
AveXis	3

**Table 2: Name of Company/Organization, continued**

	N
Avid Solutions	2
Barrett, Woodyard & Associates, Inc.	1
Bechtel	1
Becton Dickinson	1
Belcan	2
Beverage-Air	1
Black & Veatch	1
Blackbaud	1
Bluebird Bio	1
Boeing	4
Brasfield & Gorrie	3
Burke Design Group	1
Burns and McDonnell	1
CACI	1
CALYX Engineers and Consultants	1
CRB	1
Cape Fear Engineering	1
Capital One	1
Carimus	1
Cary Dermatology	1
Caterpillar Inc.	1
Charlee English School	1
Choate Construction	1
Cisco	10
Citrix	5

**Table 2: Name of Company/Organization, continued**

	N
Clinical Tools	1
Coffman Engineers	1
Collier Research Corporation	1
Collins Aerospace	2
Corning Inc.	1
Credit Suisse	2
Cree Inc	3
Crenshaw Consulting	3
Crowder Construction	2
Cypress Creek Renewables	2
DRÄXLMAIER Automotive	1
Debotech	1
Deere-Hitachi Construction Machinery Corporation	1
Dell EMC	2
Deloitte	2
Delta Air Lines	1
Design Group	1
Deutsche Bank	2
Dewberry	4
Duke Energy	4
Duke Health	1
ESP Associates	1
Eastman Chemical Company	2
Eaton Corporation	4

**Table 2: Name of Company/Organization, *continued***

	N
Emerson	1
Emirates Nuclear Energy	1
Engineered Tower Solutions, PLLC	1
Epic	3
Ernst & Young	5
Ethicon, Inc. (Johnson and Johnson Family Company)	1
Extron	2
ExxonMobil	2
ExxonMobil Chemical Company	1
FDH infrastructure	1
Fidelity Investments	7
First Citizens Bank	1
Fleming Engineering, Inc.	1
Flux Hybrids	1
Fred Smith Company	1
Freddie Mac	1
Fujifilm Diosynth Biotechnologies	1
GE	2
GE Aviation	2
GF Linamar	1
GSK	1
Gannett Fleming	1
Garmin	1
General Dynamics Mission Systems	1

**Table 2: Name of Company/Organization, *continued***

	N
General Mills	1
Georgia-Pacific	1
Gerdau North America	1
Gilbarco Veeder-Root	1
Google	3
Greystar	1
Guideway Care	1
HDR Inc.	1
HNTB	1
Hazen and Sawyer	1
Hennings Construction Company, LLC	1
Honda Aircraft	1
Honeywell	1
Hughes Engineering	1
Huntington Ingalls	1
IBM	5
ITW Hartness	1
Ideal Industries	1
Infosys	1
Infosys Limited	1
Insight Enterprises	1
Intel	1
International Mission Board	1
International Paper	2
Jacobs	2

**Table 2: Name of Company/Organization, continued**

	N
Jacobs Engineering Group	2
John Deere	6
Johns Hopkins Applied Physics Lab	1
Juniper Networks	1
KBI BioPharma	1
KCI Technologies	1
Kiewit	1
Kimley-Horn	5
LORD Corporation	1
Level	1
LexisNexis	2
Lighthouse Engineering	1
Lithko Contracting	1
MC Dean	1
Manhattan Associates	1
Maxim Integrated	1
McAdams	1
McGill Associates	2
McKim and Creed	1
Merck	4
Meritor	1
MetLife	1
Microsoft	1
Missile Defense Agency	1
Mitsubishi Hitachi Power Systems	1



**Table 2: Name of Company/Organization, continued**

	N
Moore Hackney & Associates	1
Mott MacDonald	1
NAVAIR	4
NAVSEA	2
NAVSUP	1
NCDOT	6
Nalco	1
Nan Ya Plastics	1
NetApp	1
Newport News Shipbuilding	3
Noregon Systems	1
Norfolk Naval Shipyard	1
North Carolina Air National Guard	1
Northrop Grumman	1
Nucor	1
Nvidia	1
Ofni Systems	1
OpFlow	1
Optum	3
Oracle	2
PNODE, Inc.	1
Peace Corps	1
Pentair	2
Persistent Systems	1
Pfizer	1

**Table 2: Name of Company/Organization, continued**

	N
Pharmasys	1
Philadelphia Energy Solutions	1
Philpott Ball & Werner	1
Plexus	2
Pratt & Whitney	1
Procter and Gamble	2
Prometheus Group	2
Qorvo	2
R.E. Mason	1
RK&K	1
RMF Engineering	1
Red Hat	1
Red Ventures	1
Reformed University Fellowship	1
Reformed University Ministries	1
Revature	1
Ross Stores	1
Rovisys	2
S&ME	1
SAS	3
SEPI Engineering	2
STV	1
Samet Corporation	1
Samsung	2
Savannah River Remediation	1

**Table 2: Name of Company/Organization, continued**

	N
Scinovia Corp	1
ScribeAmerica	1
Sequence	2
Shaw Inc.	1
Shook Construction	1
Siemens	2
Signalscape	2
Simpson's Engineers and Associates	1
Solers	1
Solid Site PLLC.	1
SonoVol	1
Southeastern Container, Inc.	1
Stallergenes Greer	1
Stanley Black and Decker	1
Stantec	1
Sungate Design Group, PA	1
Super League Gaming	1
SuperDroid Robots	1
Symbrium	3
Systemex	1
TE Connectivity	1
The City of Rocky Mount	1
The Clorox Company	1
The Hartford Insurance	1
The Timken Company	1

**Table 2: Name of Company/Organization, continued**

	N
Timmons Group	2
Tindall Corporation	1
Tower Engineering Professionals	4
Trilliant	1
Trillum Engineering	1
US Air Force	3
US Army	3
US Department of Defense	1
US Marine Corps	1
US Navy	7
USPS	1
Uber ATG	1
Underwriters Laboratories	1
United Technologies	1
VHB	1
VX Aerospace	2
Venture For America	1
Verizon	1
Volvo Group Trucks Technology	1
W.L. Gore	1
WSP	4
Water and Land Solutions	1
WestRock	1
Westinghouse Electric Company	1
WillowTree	1

**Table 2: Name of Company/Organization, continued**

	N
WithersRavenel	1
XPO Logistics	1
Xylem, Inc.	1
Yokohama Tire Corporation	1
iCiDigital	1
ionMedia	1

**Table 3: Location of Company (state)**

	N	%
North Carolina	259	66.4
Virginia	24	6.2
Georgia	13	3.3
South Carolina	13	3.3
California	8	2.1
Florida	8	2.1
Minnesota	6	1.5
Maryland	5	1.3
Illinois	3	0.8
Kansas	3	0.8
Oklahoma	3	0.8
Pennsylvania	3	0.8
Tennessee	3	0.8
Washington	3	0.8
Wisconsin	3	0.8
Alabama	2	0.5
Arizona	2	0.5

**Table 3: Location of Company (state), continued**

	N	%
District of Columbia	2	0.5
Louisiana	2	0.5
Missouri	2	0.5
New York	2	0.5
Texas	2	0.5
Connecticut	1	0.3
Iowa	1	0.3
Massachusetts	1	0.3
Michigan	1	0.3
Nebraska	1	0.3
New Hampshire	1	0.3
New Jersey	1	0.3
Ohio	1	0.3
Oregon	1	0.3
Rhode Island	1	0.3
Not applicable - Other	1	0.3
Not sure	8	2.1

**Table 4: Region of Company (inside/outside NC Triangle)**

	N	%
Triangle	181	47.5
Outside NC	128	33.6
Other NC	72	18.9

**Table 5: Job Title**

	N
2LT Patriot Battery PL	1
2nd Lieutenant	3
ASIC Design Engineer	1
Aerospace Structural Engineer	1
Analyst	2
Application Developer	1
Applications Engineer	3
Assistant Bridge Engineer	1
Assistant Field Manager	1
Assistant Piping Engineer	1
Assistant Project Manager	2
Assistant Water Resources Engineer	2
Associate	3
Associate Consultant	3
Associate Data Engineer	1
Associate Engineer	2
Associate Professional Staff I	1
Associate Quality Engineer	1
Associate Software Engineer	6
Associate Specialist, Engineering	1
Associate Test Engineer	1
Associate Web Developer	1
Automation Engineer	3
Bioprocess Engineer	2

**Table 5: Job Title, *continued***

	N
Bioprocess Engineer I	1
Bridge Designer	1
Broadcast Engineer Associate	1
Business Analyst	2
Business Technology Analyst	2
COD Hire	1
Certification Engineer	1
Chemical Engineer	2
Chemical Process Engineer	1
Civil Design Engineer	1
Civil Engineer in Training	2
Client Systems Technician	1
Cloud Engineer	1
Cloud Software Engineer	1
Composite Aircraft Technician	1
Composite Manufacturing Technician	1
Composite Stress Analyst	1
Computer Engineer	1
Construction Manager	1
Consultant I	1
Contract Engineer - Base Support / Heavy Maintenance Provider	1
Controls Engineer	1
Corporate Project Engineer	1
Customer Order Engineer	1



**Table 5: Job Title, *continued***

	N
DEP Engineer	1
Data Collector	1
Data Engineer	1
Design Engineer	4
Design Verification Engineer	1
Designer	1
Designer I	1
DevOps Strategy Developer	1
Developer	1
Digital Targeter	1
ECD Engineer	1
Edison Engineer	1
Electrical Design Engineer	1
Electrical Developer I	1
Electrical Engineer	5
Electrical Engineer I	3
Electrical Engineering	1
Electrical/Software Engineer	1
Embedded Software Application Developer	1
Embedded Software Developer	1
Embedded Software Engineer	1
Embedded Systems Engineer	1
Engineer	6
Engineer Consultant I	1
Engineer I	11

**Table 5: Job Title, *continued***

	N
Engineer II	1
Engineer in Training	3
Engineering Analyst	1
Engineering Associate	2
Engineering Intern	1
Engineering Leadership Development Program	3
Engineering Resident	1
Engineering Specialist	1
Engineering Technician	2
English Teacher	1
Ensign	2
Enterprise Operations Technical Associate	1
Entry Engineer	1
Entry Land Developer	1
Entry Level Civil Engineer	1
Entry Level Electrical Engineer	1
Entry Level Engineer	2
Entry Level Software Engineer	1
Entry-level Project Engineer	1
Environmental Engineer	2
FPGA Design Engineer	1
Fellow	1
Field Engineer	2
Field Service Trainee	1
Firmware Engineer	1

**Table 5: Job Title, continued**

	N
Firmware Engineer Intern	1
Fixed Equipment Engineer	1
Full Stack Developer	1
GPS Coordinator & Estimator	1
General Engineer	2
Geotechnical Engineer	1
Graduate Civil Engineer	1
Hydroelectric Systems Owner	1
Industry 4.0 Stanley Leadership Program Engineer	1
Intern	1
Investment Banking Analyst	1
Java Developer	1
Jr. Design Engineer	2
Junior Analytics Engineer	1
L2 Support Engineer	1
LEAD - Operations	1
LEAD-Operations Program Member	1
Management Engineer	1
Manufacturing Associate	1
Manufacturing Engineer	3
Manufacturing Engineer Development Program	1
Manufacturing Engineer I	1
Manufacturing Equipment Engineer	1
Materials Engineer	1

**Table 5: Job Title, *continued***

	N
Materials Process Engineer	1
Materials Test Engineer	1
Mechanical Design Engineer	1
Mechanical Designer	1
Mechanical Engineer	7
Mechanical Engineer In-Training	1
Mechanical Engineering Management Associate	1
Medical Assistant	1
Medical Scribe	1
Metallurgist	1
Network Automation Engineer	1
Network Engineer	1
Nuclear Engineer	3
Nuclear Engineer I	1
Nuclear Fuel Analysis Engineer	1
Nuclear Propulsion Officer Candidate	1
Operational Management Trainee for IE	1
Operations Development Associate	1
Operations Development Project Lead	1
Operations Engineer	2
Operations Industrial Engineer	1
Operations Management and Leadership Program Associate	2
PM&E Engineering Designer	1
Pilot	2

**Table 5: Job Title, continued**

	N
Planner	1
Power Systems Controls Engineer	1
President	1
Pricing Analyst	1
Process Automation Systems Engineer	1
Process Development Associate	1
Process Engineer	15
Process Engineer I	1
Process Improvement Engineer	1
Process Leader	1
Process and Validation Engineer	1
Product Engineer	1
Product Quality Engineer	1
Productivity Engineer	1
Programmer	1
Programmer Analyst	1
Project Engineer	9
Project Engineer I	2
Project Handler II	1
Project Manager	1
Quality Assurance Engineer	1
Quality Engineer	1
R&D Hardware Engineer	1
REACH Engineer	1
RF Engineer	1

**Table 5: Job Title, *continued***

	N
RUF Intern	2
Reactor Service Engineer	1
Residence Director	1
Risk Management - Models and Methodology	1
Roadway Design Analyst	1
Roadway Design Engineer	1
Roadway EIT	1
Sales Training Representative	1
Secondary Education Science Teacher	1
Ship Integration Engineer	1
Site/Civil Entry Level Engineer	1
Smog Chamber Engineer	1
Software Consultant	1
Software Delivery As A Service for Cloud Native Engineering	1
Software Developer	7
Software Developer in Test	1
Software Development Engineer	1
Software Development Engineer I	1
Software Engineer	28
Software Engineer I	5
Software Engineering Resident	1
Software Quality Engineer	1
Software and Controls Engineer	1
Stress Engineer	1

**Table 5: Job Title, *continued***

	N
Structural Analyst	1
Structural Designer	1
Structural Engineer	3
Structural Engineer I	2
Submarine Officer	2
Summer Engineering Intern	1
Superintendent	1
Superintendent in Training	1
Supply Chain Leadership Development Program	1
Surface Warfare Officer (Nuclear)	1
Systems Engineer	7
Systems Engineer I	1
Systems Software Engineer	1
TDP - Associate	1
Technical Analyst	6
Technical Consultant	1
Technical Sales Engineer	1
Technical Services	1
Technical Services Engineer	1
Technical Solutions Engineer	2
Technology Advisor	1
Technology Advisory Consultant	2
Technology Advisory Staff	2
Technology Analyst	2
Technology Development Program Associate	1

**Table 5: Job Title, *continued***

	N
Test Technician	1
Test Triage Analyst	1
Traffic Analyst	1
Traffic Engineer	1
Transportation Engineering Associate	5
Transportation Technician	1
Validation Engineer	3
Water Resources Design Engineer I	1
Water Resources Designer	1
Workday Integration Specialist	1



**Table 6: Resources Used to Help Get/Locate Job\***

	N	%
Internship/externship	187	46.8
Career fair at NC State	182	45.5
Applied for job via ePack	79	19.8
Campus or college career center	76	19.0
Co-op experience	73	18.3
LinkedIn	72	18.0
Family/friends/classmates/co-workers	65	16.3
On-campus interviewing	63	15.8
Personal connection(s) within the company	63	15.8
Employer info session on campus	32	8.0
Internet: Other	30	7.5
Consultation with NC State Career Counselor/Coach	21	5.3
Volunteer work	20	5.0
Employer found resume on ePack	19	4.8
Professional society	14	3.5
Faculty member or found job listing in an NC State dept	11	2.8
Career fair off campus	6	1.5
Student teaching experience	6	1.5
Staffing agency	3	0.8
Other	20	5.0

\*Respondents could select more than one resource.

## Further Education (college overall)

**Table 7: Status for Graduate/Professional School Attendance (among those planning to attend)**

	N	%
Have been accepted and know where I'm going	96	81.4
Have been accepted but undecided	6	5.1
Have applied, but not yet been accepted	9	7.6
Have not applied but plan to do so within the next year	7	5.9

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 and knew where they would be going.

**Table 8: Name of Graduate/Professional School Students will be Attending**

	N
Boston University	1
CMU	1
CU Boulder	1
Campbell University	1
Clemson University	1
Colorado State University	1
Columbia University	2
Duke University	4
Florida Institute of Technology	1
Georgetown University	1
Georgia Tech	2
MIT	2
NC State University	45
Naval Postgraduate School	1
New York University	1

**Table 8: Name of Graduate/Professional School Students will be Attending, *continued***

	N
Northwestern University	1
Penn State	1
Purdue University	1
Stanford University	3
The University of Michigan, Ann Arbor	1
UCLA	1
UNC Chapel Hill	1
UNC Charlotte	1
University of Chicago	1
University of Colorado at Boulder	2
University of Delaware	1
University of Illinois at Urbana-Champaign	1
University of Michigan	3
University of Michigan Ann Arbor	3
University of Pennsylvania	2
University of Texas - Austin	4
University of Utah	1
University of Virginia	2
University of Washington	1

**Table 9: Location of Graduate/Professional School Students will be Attending**

	N	%
North Carolina	52	54.2
Michigan	7	7.3
California	5	5.2
Colorado	4	4.2
Pennsylvania	4	4.2
Texas	4	4.2
Illinois	3	3.1
Massachusetts	3	3.1
New York	3	3.1
Georgia	2	2.1
Virginia	2	2.1
Delaware	1	1.0
District of Columbia	1	1.0
Florida	1	1.0
Indiana	1	1.0
South Carolina	1	1.0
Utah	1	1.0
Washington	1	1.0

**Table 10: Type of Degree\***

	N	%
Master's	61	63.5
Doctoral	33	34.4
Professional	5	5.2

\*Respondents could select more than one degree.

**Table 11: Master's Degree**

	N
CPE	1
ETCMS	1
MCRP	3
MCS	2
ME	13
MEM	1
MID	1
MIE	1
MRS	1
MS	29
MSAE	1
MSCPE	1
MSME	5

**Table 12: Doctoral Degree**

	N
PhD	33

**Table 13: Professional Degree**

	N
JD	3
MD	2

**Table 14: Academic Program\***

	N
Accelerated Master's in Computer Engineering	1
Aeronautics and Astronautics	1
Aerospace Engineering	5
Aerospace Engineering - Dynamics and Control	1
Aerospace Engineering Sciences	1
Aerospace engineering	1
Analytics	1
Biomedical Engineering	2
Biomedical Engineering Masters	1
CBE	1
CPE	1
CS	1
Chemical Engineering	2
Chemical Engineering - Ph.D.	1
Civil Engineering	6
Civil Engineering - structures concentration	1
Computer Engineering	7
Computer Engineering MS	1
Computer Science	1
Computer Science MCS	1
Computer engineering	1
Computer science	1
ECE	2
Electric Power Systems Engineering	1

**Table 14: Academic Program\*, continued**

	N
Electrical Engineering	10
Engineering Management	1
Health Physics	1
Industrial Design	1
Law	1
Law School	1
Law school	1
M.S. in Aerospace Engineering	1
MAE	1
MSE	1
MSEE	1
Master of Science in Mechanical Engineering	1
Masters in Industrial Engineering	1
Material Science and Engineering	1
Materials Science and Engineering	2
Mechanical Engineering	9
Mechanical Engineering - PhD	1
Mechanical Engineering M.S.	1
Mechanical and Aerospace Engineering	1
Medical Scientist Training Program (MD-PhD)	1
Nuclear Engineering	1
Nuclear Engineering and Radiological Sciences	1
PhD in Chemical Engineering	1
PhD in Computer Science	1
PhD in Electrical Engineering	1

**Table 14: Academic Program\*, continued**

	N
PhD in Mechanical Engineering	1
PhD in biomedical engineering	1
PhD, Materials Science and Engineering	1
PhD, Mechanical Engineering	1
PhD, chemical engineering	1
Pharmaceutical Sciences	1
Robotics	1
School of Medicine	1
Technical Communication	1
Undersea Warfare Program	1
computer science	1

\*Academic program has not been cleaned. Responses are verbatim.

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