

Combined Future Plans Surveys and Survey of Recent Graduates: Academic Year 2021-2022 Doctoral and Master's Degree Recipients Introduction, Research Methods, and Response Rates

The 2021-2022 Academic Year (AY21-22) reports present combined results from the December 2021 and May 2022 Graduate Future Plans Surveys (GFPS) and the September 2022 Graduate Survey of Recent Graduates (GSRG). The GFPS and GSRG are designed to collect specific information on master's and doctoral degree recipients' plans following graduation, including detailed information on employment, additional graduate/professional school attendance, and participation in career preparation activities while at NC State.

This introductory report provides an overview of the research methods and response rates. Additional results, including a one-page fast facts sheet, interactive dashboards, as well as copies of the questionnaires, can be found on the Institutional Strategy and Analysis (ISA) [website](#).

Research Methods

The Graduate Future Plans Survey population for each survey administration includes all master's and doctoral students who have submitted an "application for degree" and been approved by their academic department to graduate by the end of that semester. The survey is administered in the weeks surrounding fall and spring commencement exercises. The Fall 2021 survey was in the field from December 2 to January 12, and the Spring 2022 survey was in the field from April 28 to June 1.

The Graduate Survey of Recent Graduates, administered in September, is a follow-up survey to the GFPS. Students who did not participate in the GFPS when they graduated in either December or May, along with those who received their degree in either Summer I or Summer II (and therefore were not invited to participate in the GFPS that academic year), are invited to participate in the GSRG. In order to get updated information from them, GSRG invitations are also sent to all graduates from the past year who indicated that, at the time they completed either the December or May GFPS, they not yet found full-time employment, had not yet decided on or been accepted into graduate school, or were still undecided on their plans. The September 2022 Graduate Survey of Recent Graduates was in the field from September 6 to October 5.

The final survey population for the combined GFPS and GSRG surveys is all those who received a master's or doctoral degree during the academic year, i.e., December 2021, May 2022, and 2022 Summer I and II. For respondents who completed both the GFPS and the follow-up GSRG, only their data from the GSRG are retained. For respondents who graduated in multiple semesters during the academic year (e.g., earned two master's and/or doctoral degrees) and submitted the GFPS in both December and May, or who submitted the GFPS and GSRG, only data from the most recent survey is retained. More detailed information on the GSRG population can be found in Appendix A.

Response Rates

A total of 2,881 master's ($n=2,328$) and doctoral students ($n=553$) received their degrees from NC State in the 2021-2022 academic year (Tables 1 and 2). This includes 814 graduates in December 2021 (198 doctoral and 616 master's degree recipients), 1,627 who graduated in May 2022 (207 doctoral and 1,420 master's degree recipients), and an additional 440 who graduated in the Summer II session of 2022 (148 doctoral and 292 master's degree recipients).¹ After retaining their most recent survey record, a total of 1,707 graduates are included in the AY GFPS/GSRG results. The overall response rate for the AY20-21 GFPS/GSRG is 59 percent (59.3%; 59.7% for doctoral degree recipients and 59.1% for master's degree recipients).

Summer II graduates are slightly underrepresented in the AY GFPS/GSRG results, with 42 percent of graduates responding to the invitation to participate in the GSRG (41.9% of doctoral graduates and 42.1% of master's graduates).

Table 1: Response Rate of AY21-22 Doctoral Degree Recipients, Overall and by Semester Graduated

Semester Graduated	AY21-22 Population		GFPS/GSRG Respondents		Response Rate
	N	% of population	N	% of respondents	%
Fall 2021	198	35.8%	126	38.2%	63.6%
Spring 2022	207	37.4%	142	43.0%	68.6%
Summer II 2022	148	26.8%	62	18.8%	41.9%
Total	553	100.0%	330	100.0%	59.7%

Table 2: Response Rate of AY21-22 Master's Degree Recipients, Overall and by Semester Graduated

Semester Graduated	AY21-22 Population		GFPS/GSRG Respondents		Response Rate
	N	% of population	N	% of respondents	%
Fall 2021	616	26.5%	341	24.8%	55.4%
Spring 2022	1,420	61.0%	913	66.3%	64.3%
Summer II 2022	292	12.5%	123	8.9%	42.1%
Total	2,328	100.0%	1,377	100.0%	59.1%

Participation rates for the GFPS/GSRG varied by college. The College of Education had the highest response rate among doctoral degree recipients, with 51 of 64 doctoral degree earners completing the survey (79.7%; Table 3). Other colleges with high response rates among doctoral degree recipients include Poole College of Management (75.0%) and the College of Agriculture and Life Sciences (72.7%). Doctoral degree earners from the College of Sciences are underrepresented in the results, with 45 percent completing the GFPS/GSRG (44.8%).

The graduates of the Institute for Advanced Analytics had the highest participation rates amongst master's degree earners, with 100 percent responding to the GFPS. The College of Veterinary Medicine which had by far the fewest number of master's graduates, also had the

¹ No NC State master's or doctoral students were conferred degrees in Summer I 2022.

lowest participation rate (42.9%). The remaining colleges with master's degree recipients had response rates that fell between 50 and 70 percent.

Table 3: Response Rate of AY21-22 Doctoral Degree Recipients, Overall and by College

College/School	AY21-22 Population		GFPS/GSRG Respondents		Response Rate
	N	% of population	N	% of respondents	%
College of Agriculture and Life Sciences	66	11.9%	48	14.5%	72.7%
College of Design	9	1.6%	6	1.8%	66.7%
College of Education	64	11.6%	51	15.5%	79.7%
College of Engineering	191	34.5%	103	31.2%	53.9%
College of Natural Resources	32	5.8%	19	5.8%	59.4%
College of Humanities and Social Sciences	33	6.0%	22	6.7%	66.7%
College of Sciences	116	21.0%	52	15.8%	44.8%
Wilson College of Textiles	24	4.3%	17	5.2%	70.8%
College of Veterinary Medicine	14	2.5%	9	2.7%	64.3%
Poole College of Management	4	0.7%	3	0.9%	75.0%
Total	553	100.0%	330	100.0%	59.7%

Table 4: Response Rate of AY21-22 Master's Degree Recipients, Overall and by College

College/School	AY21-22 Population		GFPS/GSRG Respondents		Response Rate
	N	% of population	N	% of respondents	%
Institute for Advanced Analytics	115	4.9%	115	8.4%	100%
College of Agriculture and Life Sciences	261	11.2%	149	10.8%	57.1%
College of Design	75	3.2%	52	3.8%	69.3%
College of Education	355	15.2%	199	14.5%	56.1%
College of Engineering	570	24.5%	336	24.4%	58.9%
College of Natural Resources	107	4.6%	64	4.6%	59.8%
College of Humanities and Social Sciences	278	11.9%	174	12.6%	62.6%
College of Sciences	158	6.8%	80	5.8%	50.6%
Wilson College of Textiles	56	2.4%	32	2.3%	57.1%
College of Veterinary Medicine	7	0.3%	3	0.2%	42.9%
Poole College of Management	346	14.9%	173	12.6%	50.0%
Total	2,328	100.0%	1,377	100.0%	59.1%

Overview of Responses Included in Final Results

Tables 5 and 6 show from which specific survey the responses included in this report are drawn. Among those doctoral respondents who graduated in Fall 2021, the December GFPS record was used for 90 percent of them (89.7%), and the September GSRG record was used for the remaining 10 percent (10.3%). Among doctoral degree recipients who graduated in May 2022, the May GFPS record was used for 82 percent (81.7%), while one completed the December GFPS and almost one in five completed the September GSRG (17.6%). All but

two of the records for Summer II doctoral degree recipients came from the September GSRG.

Among those master's respondents who graduated in Fall 2021, the December GFPS record was used for 91 percent of them (91.2%) and the September GSRG was used for the remaining nine percent (8.8%). Among master's degree recipients who graduated in May 2022, the May GFPS record was used for about 80 percent (81.4%) while one completed the December GFPS and about two in five completed the September GSRG (18.5%). Ninety-four percent of Summer II graduates completed the GSRG (94.3%), and six percent completed the May GFPS (5.7%).

Table 5: Survey Results Included for Doctoral Degree Recipients, by Semester Graduated

Survey Results Included in Report	Graduated Fall 2021		Graduated Spring 2022		Graduated Summer II 2022		All	
	N	%	N	%	N	%	N	%
December GFPS	113	89.7%	1	0.7%	1	1.6%	115	34.8%
May GFPS	.	.	116	81.7%	1	1.6%	117	35.5%
September GSRG	13	10.3%	25	17.6%	60	96.8%	98	29.7%
Total	126	100.0%	142	100.0%	62	100.0%	330	100.0%

Table 6: Survey Results Included for Master's Degree Recipients, by Semester Graduated

Survey Results Included in Report	Graduated Fall 2021		Graduated Spring 2022		Graduated Summer II 2022		All	
	N	%	N	%	N	%	N	%
December GFPS	311	91.2%	1	0.1%	.	.	312	22.7%
May GFPS	.	.	743	81.4%	7	5.7%	750	54.5%
September GSRG	30	8.8%	169	18.5%	116	94.3%	315	22.9%
Total	341	100.0%	913	100.0%	123	100.0%	1,377	100.0%

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Appendix A: Graduate Survey of Recent Graduates Population and Response Rate

The Graduate Survey of Recent Graduates enables us to provide a more complete picture of the employment and further education of NC State's master's and doctoral degree recipients from the previous academic year, taking into consideration those who might have taken a few months beyond graduation to obtain employment or enroll in additional graduate/professional education. This appendix further breaks down the composition of the population for the September 2022 GSRG and the survey responses included in the AY reports.

Of the 2,881 graduates receiving master's or doctoral degrees in AY21-22, 1,771 were eligible to complete the September 2022 Graduate Survey of Recent Graduates (Table 7). Fifty-eight percent had not completed the Graduate Future Plans Survey when asked to do so when they graduated in either December or May (58.2%), and 25 percent were Summer II graduates who had not been invited to participate in the GFPS (24.8%). The remaining 17 percent GSRG had submitted their GFPS when they graduated in either December or May but indicated at that time that they did not have confirmed plans for after graduation. Altogether, 26 percent of the GSRG population graduated in Fall 2021, 49 percent in Spring 2022, and 25 percent in Summer II, 2022 (*data not shown*).

Four hundred and thirteen of the 1,771 AY21-22 graduates eligible to participate in the GSRG submitted their survey for an overall response rate of 23 percent (23.3%). Forty-one percent of graduates who had previously submitted their GFPS, but who had unconfirmed plans at the time, submitted the GSRG to update their information (41.5%). (As a reminder, the responses from the GFPS submitted when they graduated are included in the combined GFPS/GSRG academic year results for those who did not participate in the GSRG when asked to do so.) Graduates of the Summer II session were the next most likely group to submit the GSRG, with 176 of the 439 graduates in this group participating in the GSRG (40.1%). Those who were nonrespondents in the fall or spring were the least likely to participate in the GSRG; yet 112 graduates, or 11 percent (10.9%) of the nonrespondent population, chose to complete the GSRG.

Table 7: Graduate Survey of Recent Graduates Response Rate, by type of respondent

Group	AY21-22 Population		GFPS/GSRG Respondents		Response Rate
	N	% of population	N	% of respondents	%
GFPS respondent (<i>with unconfirmed plans</i>)	301	17.0%	125	30.3%	41.5%
GFPS nonrespondent	1,031	58.2%	112	27.1%	10.9%
Summer II graduate	439	24.8%	176	42.6%	40.1%
Total	1,771	100.0%	413	100.0%	23.3%

Loss of NC State Graduate Emails

Due to an NC State Office of Information Technology (OIT) policy change enacted in 2022, NC State graduates retain their @ncsu.edu email account for *up to six months after graduation*, after which their accounts are disabled. This impacted response rates for the September 2022 GSRG.

Of those that were scheduled to receive an SRG invitation on September 6, eighteen percent emails sent to graduates bounced (e.g., were undeliverable; 18.2%). This means that 320 graduates' email accounts had expired, and they had not updated their NC State contact information. Ninety-eight percent of these bad emails belonged to December 2021 graduates. We were subsequently able to identify valid email addresses and contact 53 graduates. This means that, ultimately, we were able to contact 85% of all those who completed a master's or doctoral degree in AY21-22 and who were eligible to take the SRG.