

Moderation Summary Report Subject: Engineering Science Level: National 5

This report summarises the context for moderation of the estimates received for this course, ie, historic attainment, the 2020 Starting Point Distributions and 2020 Estimates. It also provides the key outcomes of the moderation process for this course.

Full details of the moderation approach and the Attainment Statistics (August) 2020 can be found on SQA's statistics page (<https://www.sqa.org.uk/statistics>)¹.

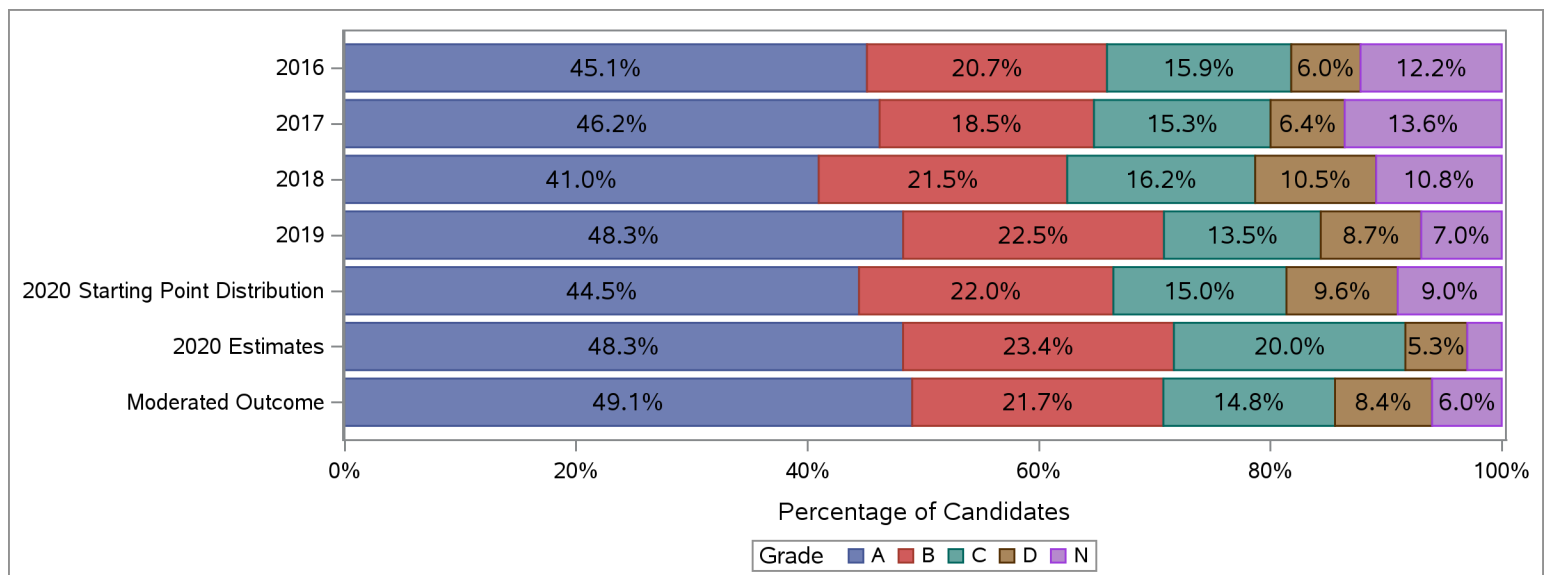
Furthermore, where small numbers of entries (values less than 5) could risk identification of individuals, those numbers and associated percentages have been suppressed in the tables below with an asterisk.

Historic Attainment, Starting Point Distribution, Estimates Received and Moderated Outcome

The table and chart below show:

- (a) historic attainment by grade for this course for years 2016 to 2019;
- (b) the Starting Point Distribution, which provides a projected distribution for 2020 attainment for this course, based on quantitative and qualitative analyses by SQA;
- (c) the distribution of 2020 estimates received from centres for this course (pre moderation); and
- (d) the distribution of grades after the moderation process.

National 5 : Engineering Science	Grade						Total	Grade					
	A	B	C	D	N	A		B	C	D	N	Total	
	Number	Number	Number	Number	Number	Number		%	%	%	%	%	%
2016	814	374	287	108	220	1,803	45.1	20.7	15.9	6.0	12.2	100.0	
2017	794	318	262	110	233	1,717	46.2	18.5	15.3	6.4	13.6	100.0	
2018	729	382	289	186	193	1,779	41.0	21.5	16.2	10.5	10.8	100.0	
2019	784	366	220	141	113	1,624	48.3	22.5	13.5	8.7	7.0	100.0	
2020 Starting Point Distribution	731	362	246	158	148	1,645	44.5	22.0	15.0	9.6	9.0	100.0	
2020 Estimates	794	385	329	88	49	1,645	48.3	23.4	20.0	5.3	3.0	100.0	
Moderated Outcome	807	357	244	138	99	1,645	49.1	21.7	14.8	8.4	6.0	100.0	



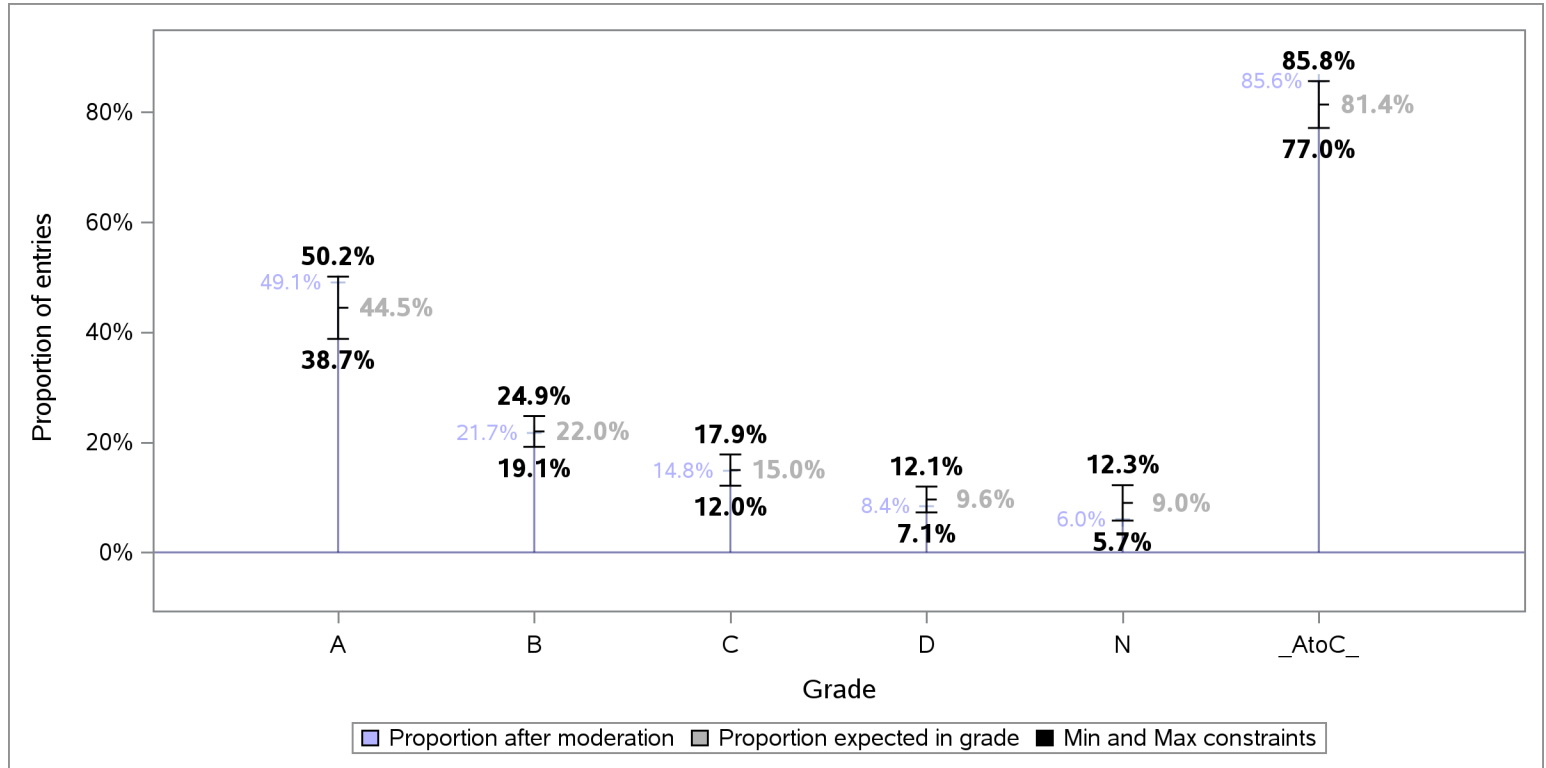
¹Some of the figures in this summary report may differ slightly to figures in the Attainment Statistics (August) 2020 publication.

This is because the the Attainment Statistics (August) 2020 publication excludes those candidates who were removed after the moderation process, including candidates who have subsequently been withdrawn by their presenting centre.

Tolerance ranges for the Starting Point Distribution

To allow for year-on-year variability in attainment, tolerance ranges were derived for each projected grade proportion in the Starting Point Distribution, and the A to C rate. For each grade, the tolerance range is derived from the 90% confidence intervals for mean historic attainment from 2016 to 2019.

The chart below shows the projected proportion for each grade, as per the Starting Point Distribution, the tolerance range for each projected proportion and proportion per grade after the moderation process.



Redistribution of estimates by grade as a result of moderation

The table below shows the number and proportion of entries that were estimated for each grade, and how these were redistributed to other grades as a result of the moderation process.

Estimated Grade	Total Entries	Moderated Grade									
		A		B		C		D		N	
		Entries	% Entries	Entries	% Entries	Entries	% Entries	Entries	% Entries	Entries	% Entries
ALL	1,645	807	49.1	357	21.7	244	14.8	138	8.4	99	6.0
A	794	756	95.2	33	4.2	*	*	*	*	*	*
B	385	47	12.2	303	78.7	33	8.6	*	*	*	*
C	329	*	*	21	6.4	196	59.6	107	32.5	*	*
D	88	*	*	*	*	10	11.4	28	31.8	50	56.8
N	49	*	*	*	*	*	*	*	*	48	98.0



Centre Moderation Summary

As detailed in the SQA National Qualifications 2020 Awarding – Methodology Report, the moderation was undertaken at centre level. SQA did not adjust estimates for new centres presenting on this course, as there was no historical evidence on which to base adjustment. The table below provides key summary information about the centre moderation process and outcomes for this course.

Moderation Summary	Number	Percentage of Total
Entries for this course	1,645	100.0%
Centres presenting for this course	100	100.0%
New Centres	5	5.0%
Entries from New Centres	55	3.3%
Highest Entries Presented by a Centre	44	.
Median Entries Presented by Centres	15	.
Lowest Entries Presented by a Centre	1	.
Centres Adjusted	66	66.0%
Centres Not Adjusted	34	34.0%
Entries Adjusted	314	19.1%
Entries Adjusted Down	231	14.0%
Entries Adjusted Up	83	5.0%
Entries Adjusted Down by One Grade	223	13.6%
Entries Adjusted Up by One Grade	79	4.8%
Entries Adjusted Down by Two Grades	8	0.5%
Entries Adjusted Up by Two Grades	*	*
Entries Adjusted Down by Three Grades	*	*
Entries Adjusted Up by Three Grades	*	*
Entries Adjusted Down by Four Grades	*	*
Entries Adjusted Up by Four Grades	*	*
Entries Adjusted from A-C to D	109	6.6%
Entries Adjusted from A-C to N	*	*
Entries Adjusted from D to A-C	10	0.6%
Entries Adjusted from N to A-C	*	*