

TABLE 41

**Federal obligations for applied research, by detailed field of science and engineering: FYs 2019–20**

(Dollars in thousands)

Field	2019	2020 (preliminary)
All fields	41,100,526.5	43,507,176.5
Computer sciences and mathematics	2,024,030.2	2,266,099.4
Computer sciences	1,746,089.6	NA
Mathematics	118,086.1	NA
Other computer sciences and mathematics	159,854.5	NA
Engineering	11,661,360.2	12,605,872.6
Aeronautical engineering	1,128,215.4	NA
Astronautical engineering	820,974.5	NA
Chemical engineering	379,215.4	NA
Civil engineering	554,753.9	NA
Electrical engineering	751,156.5	NA
Mechanical engineering	526,731.2	NA
Metallurgy and materials engineering	619,747.1	NA
Other engineering	6,880,565.9	NA
Environmental sciences	1,822,909.7	1,855,955.5
Atmospheric sciences	310,499.8	NA
Geological sciences	38,808.7	NA
Oceanography	387,135.1	NA
Other environmental sciences	1,086,466.1	NA
Life sciences	19,423,110.3	20,458,931.1
Agricultural sciences	810,912.7	NA
Biological sciences (excluding environmental biology)	9,124,634.1	NA
Environmental biology	433,990.3	NA
Medical sciences	7,385,577.2	NA
Other life sciences	1,667,996.0	NA
Physical sciences	1,909,174.4	1,891,581.1
Astronomy	6,220.8	NA
Chemistry	434,164.6	NA
Physics	875,339.8	NA
Other physical sciences	593,449.1	NA
Psychology	1,387,487.3	1,461,250.9
Biological aspects	1,445.9	NA
Social aspects	42,140.4	NA
Other psychological sciences	1,343,901.0	NA
Social sciences	704,456.9	589,385.6
Anthropology	2,290.1	NA
Economics	209,229.3	NA
Political science	3,905.3	NA
Sociology	187,366.3	NA
Other social sciences	301,665.9	NA
Other sciences nec	2,167,997.4	2,378,100.3

NA = not available; data were not collected at that level for that fiscal year.

nec = not elsewhere classified.

**Note(s):**

Because of rounding, detail may not add to total. FY 2020 preliminary data do not include obligations from supplemental COVID-19 related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act).

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2019–20.