

Table RD-9

U.S. business R&D performed, by industry and select technology focus: 2021

(Millions of U.S. dollars)

Industry	NAICS code	Domestic R&D	Software products and embedded software	Biotechnology	Nanotechnology	Artificial intelligence
All industries	21-23, 31-33, 42-81	602,499	257,030	i 102,513	32,718	i 28,875
Manufacturing industries	31-33	326,060	50,012	85,389	27,805	i 10,716
Chemicals	325	109,490	1,442	79,551	619	448
Pharmaceuticals and medicines	3254	100,220	1,290	78,889	292	397
Machinery	333	17,730	2,392	114	i 2,318	834
Computer and electronic products	334	101,063	32,906	2,344	i 23,907	i 6,874
Semiconductor and other electronic components	3344	47,396	9,270	i 41	23,549	i 4,115
Electrical equipment, appliances, and components	335	5,494	1,200	54	16	321
Transportation equipment	336	50,760	7,717	i 9	226	i 1,525
Motor vehicles, bodies, trailers, and parts	3361-63	26,391	4,254	0	3	1,147
Aerospace products and parts	3364	21,468	i 3,363	i 9	223	i 373
Nonmanufacturing industries	21-23, 42-81	276,439	207,017	i 17,123	i 4,913	i 18,159
Information	51	147,855	134,216	i 198	3,417	i 9,982
Software publishers	5112	39,049	32,926	110	3,365	i 2,364
Data processing, hosting, and related services	518	45,192	43,677	87	51	2,901
Finance and insurance	52	20,947	18,558	4	0	853
Professional, scientific, and technical services	54	66,496	25,158	i 15,504	i 1,458	i 5,487
Computer systems design and related services	5415	20,409	12,875	39	i 758	i 1,717
Scientific R&D services	5417	34,142	i 5,733	i 15,190	i 518	i 2,739

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2017 North American Industry Classification System.

Note(s):

Data are for companies with 10 or more domestic employees. Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Companies could report R&D in one, more than one, or no application area.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development (BERD) Survey, 2021.

Science and Engineering Indicators