Median years to doctorate, by major field of study: Selected years, 1970-2020

(Median years)

| Field and time to degree | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 |
|--|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------|
| All fields | | | | | | | | | | | |
| Since bachelor's | 8.0 | 8.7 | 9.3 | 10.3 | 10.6 | 10.9 | 10.3 | 9.9 | 9.3 | 8.7 | 8.7 |
| Since starting graduate school | 6.7 | 7.5 | 7.7 | 8.7 | 8.7 | 8.7 | 8.5 | 8.2 | 7.7 | 7.3 | 7.5 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.7 | 5.8 |
| Life sciences ^b | | | | | | | | | | | |
| Since bachelor's | 6.7 | 7.2 | 7.5 | 8.5 | 9.2 | 9.5 | 9.1 | 8.7 | 8.6 | 8.2 | 8.3 |
| Since starting graduate school | 5.7 | 6.2 | 6.3 | 7.2 | 7.7 | 7.7 | 7.7 | 7.1 | 6.8 | 6.7 | 6.9 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.7 | 5.5 |
| Agricultural sciences and natural resources | | | | | | | | | | | |
| Since bachelor's | 7.3 | 8.2 | 8.3 | 9.1 | 10.4 | 11.1 | 11.2 | 10.0 | 9.8 | 9.1 | 8.8 |
| Since starting graduate school | 5.7 | 6.7 | 6.7 | 7.2 | 8.0 | 8.3 | 8.7 | 7.9 | 7.9 | 7.3 | 7.3 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.2 | 5.0 |
| Biological and biomedical sciences | | | | | | | | | | | |
| Since bachelor's | 6.3 | 6.9 | 7.0 | 8.0 | 8.3 | 8.6 | 8.3 | 8.0 | 8.0 | 7.7 | 7.9 |
| Since starting graduate school | 5.7 | 6.0 | 6.2 | 6.7 | 7.2 | 7.2 | 6.9 | 6.7 | 6.6 | 6.5 | 6.7 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.7 | 5.8 |
| Health sciences | 110 | 114 | 110 | na | 110 | na | 110 | na | ina | 0.7 | 0.0 |
| Since bachelor's | 8.9 | 9.0 | 9.5 | 12.0 | 13.3 | 14.0 | 14.3 | 12.5 | 11.3 | 11.7 | 10.9 |
| Since starting graduate school | 7.1 | 7.2 | 8.0 | 9.7 | 11.2 | 11.2 | 11.2 | 9.7 | 9.0 | 9.2 | 8.8 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.3 | 5.0 |
| Physical sciences and earth sciences | na | na | na | na | na | na | na | na | na | 0.0 | 5.0 |
| Since bachelor's | 6.0 | 6.7 | 6.9 | 7.1 | 7.5 | 8.1 | 7.6 | 7.5 | 7.3 | 7.0 | 7.0 |
| Since starting graduate school | 5.7 | 5.9 | 5.9 | 6.2 | 6.7 | 6.9 | 6.7 | 6.6 | 6.5 | 6.2 | 6.3 |
| | na | na | na | na | na | na | na | na | na | 5.7 | 5.5 |
| Since starting doctoral program ^a Chemistry | IIa | IId | IId | IIa | IId | IIa | IIa | IIa | na | J.7 | 0.0 |
| Since bachelor's | 5.6 | 6.2 | 6.0 | 6.5 | 6.8 | 7.5 | 7.0 | 6.9 | 6.7 | 6.3 | 6.3 |
| Since starting graduate school | 5.0 | 0.2 5.4 | 5.2 | 6.5 5.7 | 0.8 5.7 | 6.2 | 5.9 | 6.0 | 5.9 | 5.7 | 5.8 |
| | | - | - | | - | - | | | - | 5.3 | 5.3 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.3 | 5.3 |
| Geosciences, atmospheric sciences, and ocean sciences | | 7.0 | 0.0 | 07 | 0.0 | 107 | 0.0 | 0.0 | 07 | | |
| Since bachelor's | 7.7 6.7 | 7.9 7.2 | 8.0 7.0 | 8.7 7.4 | 9.0 7.7 | 10.7 8.9 | 9.9 8.3 | 9.0 7.8 | 8.7 7.3 | 8.0 7.0 | 7.7 |
| Since starting graduate school | - | | | | | | | | | | 6.8 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.6 | 5.3 |
| Physics and astronomy | | 7.0 | 7.0 | 7 5 | | 0.0 | | 7.6 | 7.0 | 7.4 | 7.0 |
| Since bachelor's | 6.5 | 7.2 | 7.3 | 7.5 | 7.7 | 8.0 | 7.7 | 7.6 | 7.3 | 7.1 | 7.2 |
| Since starting graduate school | 5.7 | 6.7 | 6.7 | 6.7 | 6.7 | 6.9 | 6.7 | 6.7 | 6.7 | 6.3 | 6.7 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.9 | 6.0 |
| Mathematics and computer sciences | | 7.0 | 7.0 | | | | | | | 7.0 | |
| Since bachelor's | 6.0 | 7.0 | 7.2 | 8.2 | 8.3 | 9.0 | 8.7 | 8.3 | 8.0 | 7.8 | 7.9 |
| Since starting graduate school | 5.7 | 6.2 | 6.2 | 6.9 | 7.2 | 7.7 | 7.2 | 7.2 | 7.0 | 6.7 | 7.0 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.7 | 5.6 |
| Computer and information sciences | | | | | | | | | | | |
| Since bachelor's | - | - | 7.3 | 9.1 | 8.9 | 9.5 | 9.9 | 9.0 | 9.0 | 8.6 | 8.6 |
| Since starting graduate school | - | - | 6.5 | 7.4 | 7.2 | 8.1 | 8.2 | 7.7 | 7.6 | 7.6 | 7.7 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.9 | 5.8 |
| Mathematics and statistics | | | | | | | | | | | |
| Since bachelor's | 6.0 | 7.0 | 7.1 | 8.0 | 8.0 | 8.6 | 7.7 | 7.9 | 7.2 | 6.9 | 7.0 |
| Since starting graduate school | 5.7 | 6.2 | 6.2 | 6.7 | 6.9 | 7.2 | 6.9 | 6.8 | 6.3 | 6.0 | 6.3 |
| Since starting doctoral program ^a | na | na | na | na | na | na | na | na | na | 5.3 | 5.3 |

Median years to doctorate, by major field of study: Selected years, 1970-2020

(Median years)

| eld and time to degree | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 202 |
|--|------|------|------|------|------|------|------|------|------|------|----------|
| Psychology and social sciences | | | | | | | | | | | |
| Since bachelor's | 7.3 | 7.9 | 8.8 | 10.1 | 10.8 | 10.6 | 9.9 | 10.0 | 9.5 | 9.3 | 9. |
| Since starting graduate school | 6.5 | 6.9 | 7.5 | 8.7 | 8.9 | 8.7 | 7.9 | 8.2 | 7.7 | 7.7 | 7. |
| Since starting doctoral program ^a | na | 6.0 | 6. |
| Psychology | | | | | | | | | | | |
| Since bachelor's | 6.3 | 6.9 | 8.0 | 9.5 | 10.2 | 9.8 | 9.0 | 9.0 | 8.4 | 8.3 | 8. |
| Since starting graduate school | 5.7 | 5.9 | 6.7 | 7.9 | 8.5 | 7.9 | 7.2 | 7.3 | 6.9 | 7.0 | 7. |
| Since starting doctoral program ^a | na | 6.0 | 5. |
| Anthropology | | | | | | | | | | | |
| Since bachelor's | 8.3 | 8.3 | 9.7 | 12.0 | 13.1 | 12.9 | 12.2 | 11.9 | 11.9 | 11.7 | 11 |
| Since starting graduate school | 7.7 | 7.2 | 8.5 | 10.2 | 11.4 | 10.4 | 9.9 | 10.0 | 10.0 | 9.4 | 9 |
| Since starting doctoral program ^a | na | 7.7 | 7 |
| Economics | | | | | | | | | | | |
| Since bachelor's | 7.3 | 7.8 | 8.3 | 8.9 | 9.3 | 9.6 | 8.9 | 8.7 | 8.5 | 8.1 | 8 |
| Since starting graduate school | 6.3 | 6.9 | 7.2 | 7.7 | 7.7 | 8.2 | 7.4 | 7.3 | 7.0 | 6.7 | 7 |
| Since starting doctoral program ^a | na | 5.7 | 5 |
| Political science and government | | | | | | | | | | | - |
| Since bachelor's | 8.2 | 9.1 | 9.6 | 10.5 | 10.7 | 10.7 | 10.3 | 11.1 | 10.0 | 10.0 | 10 |
| Since starting graduate school | 7.1 | 8.1 | 8.2 | 9.2 | 9.3 | 8.7 | 8.5 | 9.3 | 8.2 | 8.2 | 8 |
| Since starting doctoral program ^a | na | 6.3 | 6 |
| Sociology | | | | | | | | | | 0.0 | |
| Since bachelor's | 8.8 | 8.7 | 10.0 | 11.3 | 12.3 | 11.9 | 11.0 | 11.2 | 10.7 | 11.0 | 11 |
| Since starting graduate school | 7.7 | 7.7 | 8.7 | 9.7 | 10.7 | 9.8 | 8.9 | 9.0 | 8.9 | 9.0 | ç |
| Since starting doctoral program ^a | na | 7.0 | 6 |
| Other social sciences | na | | 110 | 110 | 114 | 110 | 110 | 110 | | 7.0 | |
| Since bachelor's | 8.8 | 9.4 | 10.2 | 11.7 | 12.6 | 12.4 | 12.1 | 12.5 | 12.0 | 11.3 | 11 |
| Since starting graduate school | 7.6 | 8.2 | 8.7 | 9.7 | 10.1 | 10.3 | 9.7 | 10.2 | 9.3 | 9.0 | ç |
| | na | 6.0 | 6 |
| Since starting doctoral program ^a Engineering | IIa | na | IId | IIa | IId | IId | IId | IIa | IIa | 0.0 | |
| Since bachelor's | 7.0 | 7.6 | 7.7 | 8.2 | 8.3 | 9.2 | 8.7 | 8.3 | 7.8 | 7.3 | - |
| Since starting graduate school | 5.7 | 6.5 | 6.4 | 6.7 | 6.7 | 7.3 | 7.2 | 7.3 | 6.9 | 6.7 | í E |
| | | | | - | | | | | - | | 5 |
| Since starting doctoral program ^a | na | 5.2 | ; |
| Aerospace, aeronautical, and astronautical engineering | 7.0 | 0.0 | 0.6 | 0 5 | 0.6 | 0.0 | 0.0 | 7.0 | 7.0 | 7.0 | - |
| Since bachelor's | 7.0 | 8.2 | 8.6 | 8.5 | 8.6 | 8.3 | 8.3 | 7.9 | 7.0 | | |
| Since starting graduate school | 5.7 | 7.2 | 6.9 | 7.3 | 6.7 | 7.2 | 7.7 | 7.0 | 6.6 | 6.7 | 6 |
| Since starting doctoral program ^a | na | 5.6 | 5 |
| Bioengineering and biomedical engineering | | 7.0 | 7.0 | 0.0 | | 0.0 | 0.4 | 7.4 | 7.4 | 6.0 | <u> </u> |
| Since bachelor's | 8.0 | 7.2 | 7.8 | 8.0 | 8.0 | 8.3 | 8.4 | 7.4 | 7.1 | 6.8 | |
| Since starting graduate school | 6.7 | 5.9 | 6.7 | 6.7 | 6.7 | 7.2 | 7.2 | 6.5 | 6.3 | 6.0 | |
| Since starting doctoral program ^a | na | 5.3 | 5 |
| Chemical engineering | | | | | | | | | | | |
| Since bachelor's | 6.3 | 6.9 | 6.6 | 6.9 | 6.9 | 7.5 | 6.5 | 6.6 | 6.7 | 6.1 | 6 |
| Since starting graduate school | 5.2 | 5.7 | 5.6 | 5.7 | 5.8 | 6.2 | 5.7 | 5.7 | 5.8 | 5.7 | 5 |
| Since starting doctoral program ^a | na | 5.0 | 5 |
| Civil engineering | | | | | | | | | | | |
| Since bachelor's | 7.0 | 8.7 | 8.3 | 8.7 | 9.6 | 10.2 | 9.8 | 9.0 | 9.4 | 8.1 | 8 |
| Since starting graduate school | 5.7 | 7.1 | 6.7 | 6.9 | 7.2 | 8.1 | 7.7 | 7.8 | 7.9 | 7.2 | 7 |

Median years to doctorate, by major field of study: Selected years, 1970-2020

(Median years)

| ield and time to degree | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Electrical, electronics, and communications engineering | | | | | | | | | | | |
| Since bachelor's | - | - | - | 8.0 | 8.0 | 8.6 | 8.7 | 8.6 | 8.0 | 7.8 | 7.9 |
| Since starting graduate school | - | - | - | 6.7 | 6.7 | 7.2 | 7.2 | 7.7 | 7.0 | 6.9 | 7.3 |
| Since starting doctoral program ^a | na | 5.3 | 5. |
| Industrial and manufacturing engineering | | | | | | | | | | | |
| Since bachelor's | 7.6 | 8.9 | 9.2 | 9.4 | 10.2 | 10.4 | 10.4 | 9.8 | 9.0 | 8.3 | 8. |
| Since starting graduate school | 5.9 | 6.9 | 7.7 | 7.2 | 7.7 | 7.7 | 8.7 | 8.2 | 7.7 | 7.2 | 7. |
| Since starting doctoral program ^a | na | 5.2 | 5. |
| Materials science engineering | | | | | | | | | | | |
| Since bachelor's | 6.6 | 7.7 | 7.0 | 7.2 | 8.0 | 8.7 | 8.0 | 7.8 | 7.5 | 6.6 | 6 |
| Since starting graduate school | 5.7 | 6.5 | 5.7 | 6.3 | 6.2 | 7.2 | 7.1 | 6.7 | 6.5 | 6.0 | 6 |
| Since starting doctoral program ^a | na | 5.0 | 5 |
| Mechanical engineering | | | | | | | | | | | |
| Since bachelor's | 7.2 | 8.0 | 7.9 | 8.1 | 8.5 | 9.5 | 9.0 | 8.7 | 7.9 | 7.4 | 7 |
| Since starting graduate school | 5.9 | 6.7 | 6.4 | 6.3 | 6.9 | 7.7 | 7.7 | 7.7 | 6.8 | 6.7 | 6 |
| Since starting doctoral program ^a | na | 5.2 | 5 |
| Other engineering | | | | | | | | | | | |
| Since bachelor's | 7.0 | 7.5 | 7.9 | 9.0 | 8.9 | 10.0 | 9.7 | 8.7 | 8.4 | 8.0 | 8 |
| Since starting graduate school | 5.7 | 6.5 | 6.7 | 6.9 | 7.2 | 7.7 | 7.7 | 7.6 | 7.3 | 7.1 | 7 |
| Since starting doctoral program ^a | na | 5.2 | 5 |
| Education | | | | | | | | | | | |
| Since bachelor's | 12.8 | 12.6 | 13.2 | 15.2 | 18.0 | 19.9 | 19.4 | 17.4 | 16.2 | 14.8 | 15 |
| Since starting graduate school | 10.2 | 9.9 | 10.7 | 12.7 | 14.7 | 15.7 | 14.2 | 13.0 | 12.5 | 11.7 | 12 |
| Since starting doctoral program ^a | na | 6.0 | 5 |
| Education administration | | | | | | | | | | | |
| Since bachelor's | 15.0 | 14.6 | 15.0 | 16.9 | 19.6 | 22.1 | 23.2 | 20.6 | 19.4 | 18.6 | 18 |
| Since starting graduate school | 11.7 | 11.7 | 12.2 | 14.2 | 16.3 | 18.7 | 18.0 | 15.0 | 15.1 | 15.2 | 14 |
| Since starting doctoral program ^a | na | 6.7 | 5 |
| Education research | | | | | | | | | | | - |
| Since bachelor's | 11.2 | 11.3 | 12.7 | 14.6 | 17.2 | 18.5 | 17.1 | 15.3 | 14.6 | 13.3 | 14 |
| Since starting graduate school | 8.9 | 9.2 | 10.2 | 11.9 | 13.9 | 14.4 | 12.7 | 12.0 | 11.6 | 10.9 | 11 |
| Since starting doctoral program ^a | na | 6.0 | 5 |
| Teacher education | | | | | | | | | | | - |
| Since bachelor's | 13.9 | 14.3 | 13.4 | 15.3 | 18.7 | 20.9 | 22.0 | 19.3 | 17.9 | 17.0 | 16 |
| Since starting graduate school | 10.9 | 10.9 | 10.9 | 12.9 | 14.3 | 15.9 | 14.9 | 13.7 | 13.1 | 13.4 | |
| Since starting doctoral program ^a | na | 6.2 | 5 |
| Teaching fields | | | | | | | | | | | - |
| Since bachelor's | 12.3 | 12.2 | 12.3 | 13.8 | 15.6 | 16.7 | 16.3 | 15.8 | 15.0 | 14.3 | 14 |
| Since starting graduate school | 9.9 | 9.9 | 10.2 | 11.2 | 12.2 | 12.9 | 12.2 | 11.7 | 11.1 | 11.3 | 11 |
| Since starting doctoral program ^a | na | 5.9 | 5 |
| Other education | | | | | | | | | | | |
| Since bachelor's | 13.5 | 13.9 | 14.3 | 15.4 | 18.3 | 19.8 | 18.0 | 17.0 | 16.3 | 15.7 | 15 |
| Since starting graduate school | 10.7 | 10.7 | 11.1 | 12.5 | | 15.7 | 13.2 | 12.3 | 12.1 | 12.3 | |
| Since starting doctoral program ^a | na | 6.3 | |
| Humanities and arts | | | | | | | | | | 0.0 | |
| Since bachelor's | 9.0 | 9.9 | 10.9 | 11.9 | 12.3 | 12.1 | 11.6 | 12.0 | 11.6 | 11.0 | 11 |
| Since starting graduate school | 7.9 | 8.7 | 9.7 | 10.2 | 10.7 | 10.1 | 9.7 | 9.9 | 9.5 | 9.2 | 9 |
| Since starting doctoral program ^a | na | 6.9 | |

Median years to doctorate, by major field of study: Selected years, 1970-2020

(Median years)

| Field and time to degree | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 |
|--|------|------|------|------|------|------|------|------|------|------|------|
| Foreign languages and literature | | | | | | | | | | | |
| Since bachelor's | 9.0 | 10.0 | 11.0 | 11.9 | 11.6 | 11.2 | 11.2 | 11.0 | 11.4 | 10.7 | 10.8 |
| Since starting graduate school | 7.7 | 8.7 | 9.7 | 10.2 | 9.7 | 8.9 | 8.9 | 9.3 | 9.1 | 8.9 | 9.0 |
| Since starting doctoral program ^a | na | 6.9 | 6.7 |
| History | | | | | | | | | | | |
| Since bachelor's | 9.0 | 9.5 | 10.7 | 11.9 | 12.7 | 12.2 | 11.3 | 11.7 | 11.3 | 10.9 | 11.0 |
| Since starting graduate school | 7.9 | 8.7 | 9.7 | 10.7 | 10.7 | 9.7 | 9.2 | 10.0 | 9.4 | 9.0 | 9.3 |
| Since starting doctoral program ^a | na | 7.0 | 7.0 |
| Letters | | | | | | | | | | | |
| Since bachelor's | 9.0 | 9.2 | 10.6 | 11.8 | 12.0 | 11.6 | 10.9 | 11.7 | 11.2 | 10.3 | 10.8 |
| Since starting graduate school | 7.7 | 8.2 | 9.7 | 9.9 | 10.0 | 9.7 | 9.2 | 9.7 | 9.0 | 8.9 | 9.0 |
| Since starting doctoral program ^a | na | 6.7 | 6.3 |
| Other humanities and arts | | | | | | | | | | | |
| Since bachelor's | 10.0 | 10.6 | 11.0 | 12.0 | 12.6 | 12.9 | 12.6 | 12.3 | 12.0 | 11.8 | 11.6 |
| Since starting graduate school | 8.7 | 9.7 | 9.9 | 10.3 | 11.0 | 11.1 | 10.7 | 10.3 | 9.7 | 9.9 | 9.9 |
| Since starting doctoral program ^a | na | 7.1 | 6.8 |
| Other ^c | | | | | | | | | | | |
| Since bachelor's | 10.0 | 10.1 | 11.0 | 13.0 | 13.2 | 13.2 | 13.6 | 13.0 | 12.1 | 11.2 | 11.3 |
| Since starting graduate school | 7.9 | 8.6 | 9.2 | 10.7 | 10.2 | 10.3 | 10.2 | 10.3 | 9.3 | 8.9 | 9.3 |
| Since starting doctoral program ^a | na | 5.3 | 5.3 |
| Business management and administration | | | | | | | | | | | |
| Since bachelor's | 9.1 | 9.5 | 10.4 | 11.9 | 12.0 | 12.2 | 13.0 | 12.4 | 11.5 | 10.7 | 10.6 |
| Since starting graduate school | 7.0 | 7.9 | 8.7 | 9.6 | 9.0 | 9.7 | 9.9 | 9.8 | 8.9 | 8.7 | 8.9 |
| Since starting doctoral program ^a | na | 5.0 | 5.0 |
| Communication | | | | | | | | | | | |
| Since bachelor's | 10.0 | 9.1 | 9.9 | 12.0 | 12.2 | 11.6 | 12.0 | 12.0 | 11.3 | 10.3 | 10.3 |
| Since starting graduate school | 7.3 | 7.9 | 7.7 | 9.9 | 9.7 | 9.5 | 9.2 | 9.3 | 8.7 | 8.0 | 8.7 |
| Since starting doctoral program ^a | na | 5.3 | 5.3 |
| Non-S&E fields nec | | | | | | | | | | | |
| Since bachelor's | 13.0 | 13.4 | 13.3 | 15.5 | 15.9 | 16.9 | 16.0 | 15.0 | 14.5 | 13.0 | 13.0 |
| Since starting graduate school | 9.9 | 11.2 | 10.7 | 12.7 | 13.1 | 13.9 | 12.7 | 12.7 | 11.0 | 10.7 | 10.8 |
| Since starting doctoral program ^a | na | 6.0 | 5.8 |

na = not applicable; not available prior to 2014.

nec = not elsewhere classified; S&E = science and engineering.

^a Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

^b Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

^c Includes other non-science and engineering fields not shown separately.

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.