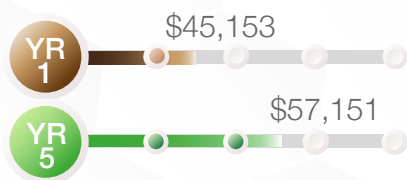# THE IT INDUSTRY AND UA GRADUATES
FAST FACTS

UNIVERSITY *of* ALASKA
Many Traditions One Alaska

The University of Alaska has identified 14 programs whose graduates are important to the information technology (IT) industry in Alaska. Detailed below are their employment and wage outcomes, plus other information that can be used to assess UA programs and their usefulness to one of the state's key industries.

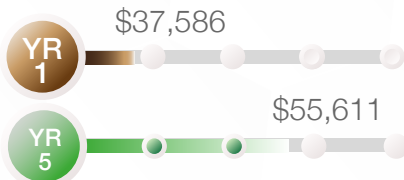## Graduates from key UA programs

INFORMATION TECHNOLOGY

77.1% working in AK within a year of graduating

YR 1 — $45,153
YR 5 — $57,151

26.6% wage growth

COMPUTER & NETWORKING TECH

80.2% working in AK within a year of graduating

YR 1 — $37,586
YR 5 — $55,611

48.0% wage growth

COMPUTER SCIENCE & ENGINEERING

72.3% working in AK within a year of graduating

YR 1 — $42,282
YR 5 — $62,035
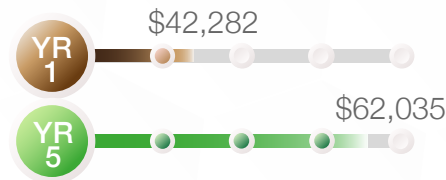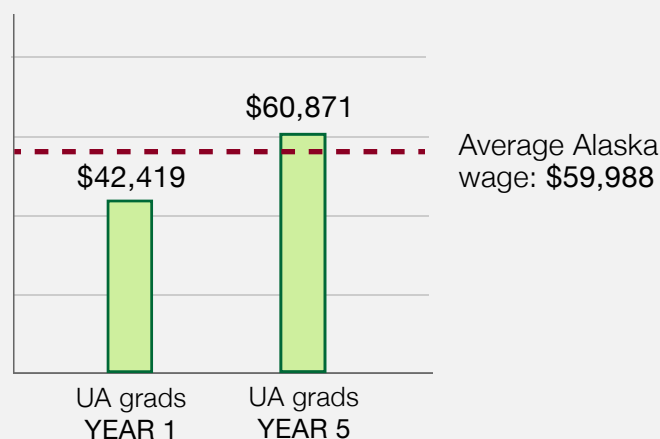
46.7% wage growth

Note: Data reflects the actual employment and wage data of all graduates working in Alaska, and is not limited to those employed in IT

The industries where first-year graduates work

- Other Industries 42.9%
- Educational Services 20.9%
- Professional, Scientific & Technical Services 16.4%
- IT 11.3%
- Health Care and Social Assistance 8.6%
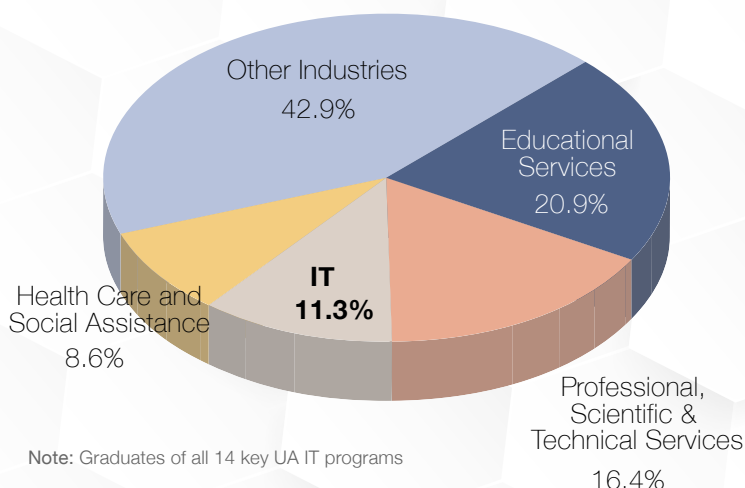
Note: Graduates of all 14 key UA IT programs

Program grads' average wages

UA grads YEAR 1: $42,419
UA grads YEAR 5: $60,871

Average Alaska wage: $59,988

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Do these programs boost the Alaska hire rate?

95.5%
of working graduates
are Alaska residents

For comparison, residency is ...

- **79.3%** for all Alaska workers
- **90.5%** for all IT* services workers

* (Professional, Scientific, & Technical Services)

Over the last three years, the IT industry hired ...

151 Computer User Support

108 Computer Network Support

87 Network/Computer System Adminstrators

72 Software Developers

70 Computer, Automated Teller, and Office Machine Repairers

Notes: These occupations have had the most hires in the past three years among occupations that require postsecondary education. Hires include all hires, not just UA grads, to identify where demand is greatest.

Where do UA's IT program grads work?
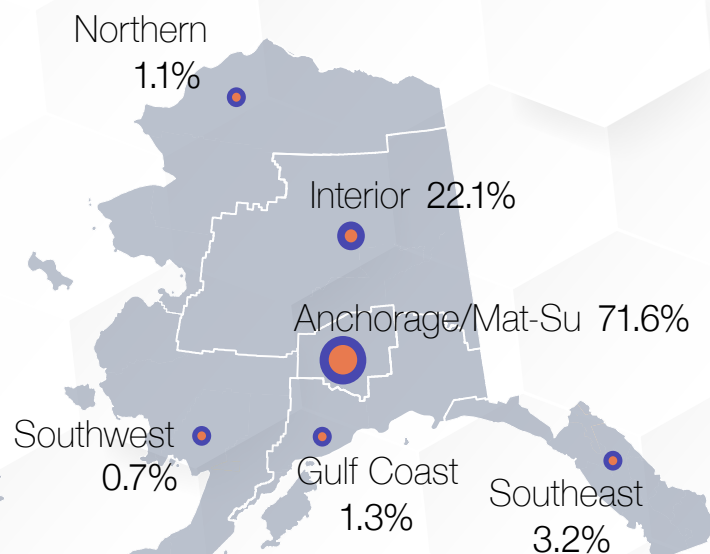
Northern
1.1%

Interior 22.1%

Anchorage/Mat-Su 71.6%

Southwest
0.7%

Gulf Coast
1.3%

Southeast
3.2%

More information on programs and the industry connection

The economic value of training and education is abundantly clear in the relevant data. Median earnings, for example, jump from $35,328 for high school graduates to $44,619 for Alaskans with an associate degree, $57,708 for those with a bachelor's degree, and $77,402 for holders of graduate or professional degrees. More education and training also correlate strongly with lower unemployment rates.

The University of Alaska, in an effort to highlight and enhance the relationship between its programs and key Alaska industries, has prepared data on the 14 programs that are particularly relevant to the state's information technology industry. These include three that result in a certificate or occupational endorsement, four that result in an associate degree, and seven that result in a bachelor's degree or higher.

Over the last 10 years, 889 people have graduated from those programs with the following outcomes by degree type:

- **Licenses and Certificates:** 173 graduates, 135 employed in Alaska within a year of graduating with average first-year wages of $36,168 and average fifth-year wages of $56,003

- **Associate Degrees:** 343 graduates, 277 employed in Alaska within a year of graduating with average first-year wages of $41,936 and average fifth-year wages of $57,931

- **Bachelor's Degrees and Above:** 373 graduates, 278 employed in Alaska within a year of graduating with average first-year wages of $45,863 and average fifth-year wages of $66,937

Three types of programs account for the largest share (85 percent) of graduates and warrant special mention:

- **Information Technology** (one certificate and one associate at UAF): 131 graduates, 101 employed in Alaska within a year of graduating with average first-year wages of $45,153 and average fifth-year wages of $57,151

- **Computer & Networking Technology** (two certificates and two associates at UAA): 353 graduates, 283 employed in Alaska within a year of graduating with average first-year wages of $37,586 and average fifth-year wages of $55,611

- **Computer Science & Engineering** (three bachelors at UAA, two bachelors and one master at UAF): 274 graduates, 198 employed in Alaska within a year of graduating with average first-year wages of $42,282 and average fifth-year wages of $62,035

The relationship between UA programs and hiring in IT

IT occupations are spread throughout many of the industries in Alaska. Only about 12% of the University of Alaska IT program graduates found employment in the IT industry, but have worked in IT occupations in other industries including educational services and public administration. For example, 44% of the graduates became computer programmers in the public administration industry sector.

Attempts to precisely match the supply of graduates with the demand for certain workers by industry would be misguided, but the data shown here are appropriate for general conclusions about the benefits of certain UA programs. More importantly, this information can help facilitate conversations with key industries about how programs could be expanded, changed, or developed to provide them with more and better trained workers.

THE IT INDUSTRY
AND UA GRADUATES
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Related questions and answers

Q: Where do the employment numbers come from?

The University of Alaska and the Alaska Department of Labor and Workforce Development's Research and Analysis Section have worked together for years to identify where university graduates are working in the state.

The detailed employment and wage information comes from quarterly reports that nearly all Alaska employers are required to file under state employment insurance law. Those records do not include federal workers or the self-employed, so university program graduates in those categories are not shown here.

Q: How were the programs and target occupations selected?

The University of Alaska analyzed labor market information to determine the largest and fastest-growing occupations in the IT industry, then linked 14 programs based on occupations' titles and characteristics. While other UA programs also provide some preparation for IT jobs, this report excludes general administrative training programs that are useful for all sectors, such as accountants and human resource professionals.

Q: Are there emphasis areas embedded within degree programs that also provide targeted training towards high growth occupations in this industry sector?

Yes, several degree programs provide options for students to specialize in an emphasis area that can enhance their education and employability. For example, a business degree can offer an emphasis area in management information systems that could lead to a career as a computer systems analyst and manager.

Q: What percentage of IT hires are UA grads?

Those types of questions can be answered only for specific program graduates or specific industry occupations, based on the long-running collaboration between the University of Alaska and the Department of Labor and Workforce Development. It's less useful to lump all the programs and degree types together.

Q: Why are the wages shown on page one and page five lower than what other published data show for average starting salaries in IT occupations?

The wage data shown are the actual wages that program graduates earned in the full first and fifth year after they graduated and there are technical reasons why the wages shown here will generally be lower than average starting salaries. Graduates who did not work in all four quarters of the first year after graduating or in all four quarters in the fifth year after graduating were not included in the wage data. They are included if they worked part-time or only worked for part of one or more the quarters as long as they worked in all four quarters. Data showing average starting salaries for certain occupations can inform prospective students about how much they can make if they find and take a job in that occupation. The wage data shown here, however, comprehensively quantify the wages actually earned by the graduates who have graduated in recent years, irrespective of what kind of job they took. Both types of wage data have valid purposes and encourage additional research when they diverge.

Q: Can this information be used for program evaluation?

It can inform those types of decisions, as well as decisions about which programs to expand, but there's far more to consider than which programs have the highest earnings or best employment outcomes. Other data such as short-term and long-term industry and occupational projections, enrollment numbers, and tuition and program costs are important, and so are less formal insights and information gathered from industry and other key stakeholders. When making key decisions about university programs, it will also be important to consider the most recent developments in the economy that can't yet be measured.

THE IT INDUSTRY AND UA GRADUATES
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The 14 programs linked to IT

Target occupations	University	Major	Degree	Gradu-ates	Employed in AK within a year	1st-year avg wage	5th-year avg wage
Software Developers and Programmers (15-1132, 15-1133, 15-1131)	UAA	Computer Science	Bachelor of Arts	16*	13	$40,858	-
	UAA	Computer Science	Bachelor of Science	102	77	$44,851	$63,755
	UAF	Computer Science	Bachelor of Science	101*	68	$35,427	$57,900
	UAA	Computer Systems Engineering	Bachelor of Science	11*	9	$48,473	-
	UAF	Computer Engineering	Bachelor of Science	16*	8	-	-
	UAF	Computer Science	Master of Science	28*	23	$49,626	$64,636
Computer Systems Analysts and Managers (15-1121, 11-3021)	UAA	Business Computer Info Systems	Associate of Applied Science	32	28	$47,829	$76,573
	UAA	Management Information Systems	Bachelor of Business Admin.	99	80	$53,192	$77,923
Network and Computer Systems Administrators and Support Specialists (15-1142, 15-1152)	UAA	Cisco Cert Network Associate	Occupational Endorsement Cert	144	114	$35,075	$54,789
	UAA	Computer & Networking Tech	Certificate	11	8	$35,869	$55,346
	UAA	Computer & Networking Tech	Associate of Applied Science	145*	118	$39,960	$59,943
	UAA	Computer Systems Tech.	Associate of Applied Science	53*	43	$37,085	$53,751
Computer User Support Specialists (15-1151)	UAF	Info Technology Specialist	Certificate	18*	13	$45,839	$71,225
	UAF	Info Technology Specialist	Associate of Applied Science	113	88	$45,062	$55,141

*Program had not yet existed for 10 years

Note: Graduate numbers are for 2009 through 2018. When wages aren't shown for a program, it's because it had too few graduates.