THE IBIT REPORT

The IBIT Report is a publication of the Institute for Business and Information Technology at Temple University. IBIT reports provide actionable knowledge to industry based on rigorous academic research.

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ABOUT THE IS JOB INDEX

The Information Systems Information Systems Job Index is the only national longitudinal assessment of jobs, placement, demographics, search, acceptance, geographical patterns, and knowledge of information systems (IS), management information systems (MIS), and computer information systems (CIS) graduates. Inaugurated in 2013 and published every 2 years, each report is based on several thousand labor market entrants from more than 30 universities across the United States.

LEARN MORE AT ISJOBINDEX.COM

SPONSOR

Thanks to Meta for making the 2022 report possible.

ACKNOWLEDGMENTS

Thanks to Manoj Chacko, Taha Havakhor, Rosaleen Magnone, and Aretha Wright for their support.

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Throughout your life, you will spend some of your most meaningful and consequential time within your career. Choosing a career path within Information Systems (IS), however, is no small task. As you consider options, it’s of great importance that you have data and insights at your fingertips to help you make the most informed decision possible and home in on what you value most in your work.

That’s why I’m particularly thrilled to introduce to you the fifth biennial iteration of the Information Systems Job Index. It is a rich resource full of data on key considerations including salary, demographics, diversity, job satisfaction and search strategies. As an engineer myself and current Chief Information Officer at Meta, I can tell you that not only is a career in IS rewarding and engaging, but the demand for skill sets in the field grows year over year, with no signs of slowing as new technologies emerge.

I’ve long had an interest in helping folks in the IS space grow and establish their careers because I believe we are uniquely positioned to play a principal role in building the future of a broad range of industries. The IS Job Index is an essential tool you can employ to expand your horizons, flourish in your profession and determine how you will help shape the future.

Atish Banerjea
CIO, Meta
Munir Mandviwalla

Munir Mandviwalla is Professor of Management Information Systems, Milton F. Stauffer Senior Research Fellow, and Executive Director of the Institute for Business and Information Technology at the Fox School of Business, Temple University. Mandviwalla applies design to improve business and society on topics such as digital transformation, broadband, social media, and IT workforce. His research has been published in top journals including MIS Quarterly, Information Systems Research, ACM Transactions, Public Administration Review, and others. He leads the Institute for Business and Information Technology, which engages with industry on knowledge and human capital development. Mandviwalla has received awards from AIS, IBM, Microsoft, Claremont Graduate University, and Temple University. He holds a BSc from Boston University, and an MBA and PhD both from Claremont Graduate University.

Michael Dinger

Michael Dinger is an associate professor of management in the Johnson College of Business and Economics at the University of South Carolina Upstate. He received a PhD in management information systems from Clemson University. His research interests include IT workforce management, information security, and virtual communities. His work appears in Information Systems Research, Journal of the Association for Information Systems, Journal of Management Information Systems, MIS Quarterly, and other outlets. He serves as associate editor at Communications of the Association for Information Systems.

Brianna Anderson

Brianna Anderson is a senior pursuing a Bachelor of Business Administration with a dual major in Management Information Systems and Marketing at the Fox School of Business, Temple University. She has always had a passion for technology and was awarded the IT Leaders Scholarship in 2021 for her outstanding achievements and accomplishments within the MIS department. Brianna has maintained high academic standing while being highly involved in her community and engaged in active memberships within various student professional organizations. Besides her role as an IS Job Index Research Assistant, she is very active within the MIS community, serving as an Information Technology Assistant for several courses and a student ambassador for the Professional Achievement program.
REPORT HIGHLIGHTS

STUDENT HIGHLIGHTS

Page 18: Consulting and Analytics are the most popular jobs among Bachelor IS graduates.

Page 20: An internship almost doubles the likelihood of getting a job offer.

PARENT HIGHLIGHTS

Page 12: Salaries for IS graduates are significantly higher than typical business majors for both Bachelor's and most Master's degrees.

Page 19: Bachelor’s IS placement is red hot at over 80% at graduation.

FACULTY HIGHLIGHTS

Page 21: There is very little change across the years in the knowledge of IS graduates.

Page 15: IS Bachelor’s female representation has grown significantly.

EMPLOYER HIGHLIGHTS

Page 23: Fairness is the most important reason that graduates accept a job offer.

Page 15: IS Bachelor’s female representation is double compared to other STEM fields.
About the IS Industry

Information Systems (IS) professionals apply and develop Information Technology (IT) in organizations, and comprise a significant portion of the IT labor market.

WHO ARE THESE PROFESSIONALS AND WHAT DO THEY DO?

+ Data Analysts
+ IT Consultants
+ Application Developers
+ Chief Information Officers (CIO) & Chief Technology Officers (CTO)

IS professionals are experts in developing, applying, modifying, and strategizing technology to digitally transform organizations. IS professionals work with other business professionals including computer scientists and engineers to create platforms that integrate digital technologies to design solutions that solve organizational problems.

The 2022 IS Job Market is Red Hot

<table>
<thead>
<tr>
<th>Job Placement Rate</th>
<th>Confidence in Job Market</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACHELOR’S: 81% 65%</td>
<td>BACHELOR’S: 64%</td>
<td>BACHELOR’S: $75,517</td>
</tr>
<tr>
<td>91% 92%</td>
<td>MASTER’S: 60%</td>
<td>MASTER’S: $94,839</td>
</tr>
</tbody>
</table>
ABOUT THE IS JOB MARKET

There are over 4 million estimated jobs in the U.S. relevant to IS.²

There are about 1,600 colleges that offer IS programs in the U.S., which are often based in Business Schools, in standalone Information Schools or integrated with Computer Science. IS programs are classified as STEM and are typically called:

+ Management Information Systems (MIS)
+ Information Systems (IS)
+ Computer Information Systems (CIS)

The recruitment, mindset, education, demographics, career paths, skills, and jobs of IS professionals are different and yet remain poorly understood.

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Entry level IS job entrants are optimistic about their careers

SATISFACTION & ENTHUSIASM ABOUT JOB OFFER
BACHELOR’S: 81%
MASTER’S: 73%

OFFER FROM APPEALING ORGANIZATION
BACHELOR’S: 86%
MASTER’S: 82%

JOB IS A GOOD FIT
BACHELOR’S: 72%
MASTER’S: 72%
Thanks to the 36 universities across the nation that agreed to formally participate in the 2022 IS Job Index.
Special thanks to the following individuals at the participating universities: Alberto Espinosa and Gwanhoo Lee, American University; Pei-yu Chen, Arizona State University; Bin Gu, Boston University; Tom Meservy, Brigham Young University; Katie Cassarly and Ron Delfine, Carnegie Mellon University; Leo Vijayasarathy, Colorado State University; Jacqueline Pike, Duquesne University; Karlene Cousins, Florida International University; Pallab Sanyal, George Mason University; Bala Ramesh, Georgia State University; Jingjing Zhang, Indiana University; Joey George and Kevin P. Scheibe, Iowa State University; Juliane Stockman, Northern Kentucky University; Rick Wilson, Oklahoma State University; Emre Yetgin, Rider University; Timothy Hill and Leslie Albert, San José State University; David Schuff, Temple University; Stella Tomasi, Towson University; John Mittenthal, The University of Alabama; Sue Brown, The University of Arizona; Andrea Morgan, University of Arkansas; Dawn Gregg, University of Colorado Denver; Jay Prasad, University of Dayton; John D’Arcy, University of Delaware; Maric Boudreau, University of Georgia; Michelle Marlin and Norman Johnson, University of Houston; William Lucas, University of Minnesota, Twin Cities; Gregory Moody, University of Nevada, Las Vegas; Radhika Santhanam and Jenn Ille, The University of Oklahoma; Kaushik Dutta, University of South Florida; Katie Gray, The University of Texas at Austin; Syam Menon, The University of Texas at Dallas; Steven Johnson, University of Virginia; Robert Crossler, Washington State University; Carrie Song, Western Michigan University
A quick look at the 2022 IS Job Market Entrants

**BACHELOR'S**
Age 23

**MASTER'S**
Age 28

77% of Bachelor's and 55% of Master's had one or more internships prior to graduation.

Female representation has jumped 10 percentage points from 2019.

Bachelor's 47%  
Master's 44%

Bachelor's 53%  
Master's 55%

Read more about female representation on page 13.
IS Bachelor's job market entrants are mostly White and increasingly Asian.

- 49% White
- 31% Asian
- 5% Black
- 5% Hispanic
- 5% Other

Read more about IS demographics on page 14.

Employed Full Time or Received Job Offer by Graduation

- Bachelor’s: 86%
- Master’s: 84%

Read more about what impacts placement on page 17.

Based on 1408 job market entrants from 36 universities across the nation.
Salaries & Offers OVERVIEW

**BACHELOR’S AVERAGE OFFER**

<table>
<thead>
<tr>
<th>Year</th>
<th>Offer ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$57,212</td>
</tr>
<tr>
<td>2015</td>
<td>$57,817</td>
</tr>
<tr>
<td>2017</td>
<td>$62,820</td>
</tr>
<tr>
<td>2019</td>
<td>$65,314</td>
</tr>
<tr>
<td>2022</td>
<td>$75,517</td>
</tr>
</tbody>
</table>

**MASTER’S AVERAGE OFFER**

<table>
<thead>
<tr>
<th>Year</th>
<th>Offer ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$65,394</td>
</tr>
<tr>
<td>2015</td>
<td>$67,632</td>
</tr>
<tr>
<td>2017</td>
<td>$84,113</td>
</tr>
<tr>
<td>2019</td>
<td>$94,839</td>
</tr>
</tbody>
</table>

**KEY TAKEAWAYS**

- *Salaries for IS graduates are significantly higher than typical business majors* for both Bachelor's and most Master's degrees.
- *Overall, IS salaries are outpacing business school salaries,* and their growth relative to 2019 represents an increasingly competitive market for hiring IS professionals.

**2022 BACHELOR’S**

<table>
<thead>
<tr>
<th>Major</th>
<th>Offer ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION SYSTEMS</td>
<td>$75,517</td>
</tr>
<tr>
<td>ACCOUNTING</td>
<td>$56,103</td>
</tr>
<tr>
<td>FINANCE</td>
<td>$62,163</td>
</tr>
<tr>
<td>MARKETING</td>
<td>$49,481</td>
</tr>
</tbody>
</table>

**2022 MASTER’S**

<table>
<thead>
<tr>
<th>Major</th>
<th>Offer ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION SYSTEMS</td>
<td>$94,839</td>
</tr>
<tr>
<td>ACCOUNTING</td>
<td>$58,703</td>
</tr>
<tr>
<td>FINANCE</td>
<td>$72,024</td>
</tr>
<tr>
<td>MARKETING</td>
<td>$58,611</td>
</tr>
</tbody>
</table>

Source: NACE Salary Survey, Summer 2022
As Chief Information Officer for Meta, Atish Banerjea oversees Enterprise Engineering, a global team that builds and runs the systems that help Meta scale globally and ships people-centric solutions that transform and accelerate Meta’s business.

The Enterprise Engineering (EE) organization focuses on building enterprise products, running corporate infrastructure and security, managing enterprise operations, including traditional operations as well as events, studios, etc. All Meta employees use EE’s services and products, so the team’s scale and opportunity to make an impact are boundless.

The Enterprise Engineering organization is truly unique in how it functions and how it was developed. Several years ago, Meta (then Facebook), was faced with a difficult problem. The company was growing exponentially, and the tools available in the marketplace could not support the rapid growth. They realized they needed to throw out the IT rulebook and do it themselves: build their own tools and have their engineers underpin all the infrastructure and operations at Meta. And so, Enterprise Engineering was born.

Meta builds technologies that help people connect, find communities, and grow businesses. When Facebook launched in 2004, it changed the way people connect. Apps like Messenger, Instagram, and WhatsApp further empowered billions around the world. Now, Meta is moving beyond 2D screens toward immersive experiences like augmented and virtual reality to help build the next evolution in social technology.
KEY TAKEAWAYS

39% of Master’s and 31% of Bachelor’s IS students move to a job outside the region in which they got their degree.

BACHELOR’S

- The Pacific outpaces all others for the highest Bachelor’s salaries.
- The Pacific had the largest increase in salaries, followed by East South Central (KY, TN, MS, AL).
- The Mid-Atlantic and Pacific regions are hot - over 50% of Bachelor’s hires move there from outside the region.
- Less than 10% of Bachelor’s hires in West North Central and East South Central are from outside the region.

2022 shows mixed salary growth, with large increases in some places contrasted with small changes in others suggesting an uneven labor market across regions.

The Pacific outpaces all others for the highest Bachelor’s salaries.

MOUNTAIN

- 25% 33%
- $70,737 8% 15% 47% 29%
- 38% 2%
- $85,707 8% 20% 20% 32%
- 100% 100%
- $115,859 8% 28% 101%

LEGEND

New England: ME, NH, VT, MA, RI, CT
Mid-Atlantic: NY, PA, NJ
South Atlantic: DE, MD, DC, VA, WV, NC, SC, GA, FL
East North Central: WI, MI, IL, IN, OH
East South Central: KY, TN, MS, AL
West North Central: MO, ND, SD, NE, KS, MN, IA
West South Central: OK, TX, AR, LA
Mountain: ID, MT, WY, NV, UT, CO, AZ, NM
Pacific: AK, WA, OR, CA, HI

Notes: Blank cells indicate that there is insufficient data to interpret. ‘Movement from’ indicates the % of entry level IS job entrants who graduated from a university in this region but moved out of this region for work.

‘Movement to’ indicates the % of entry level IS job entrants who graduated from a university outside this region but moved into this region for work.
For the first time, IS Bachelor’s female representation has surpassed the overall Business School average of 45.7%.

**Bachelor’s**

For the first time, IS Bachelor’s female representation has surpassed the overall Business School average of 45.7%.

**Master’s**

International female IS graduates are represented more equally at about 57% Bachelor’s and 47% Master’s.

**International**

International female IS graduates are represented more equally at about 57% Bachelor’s and 47% Master’s.

**Key Takeaways**

- IS female graduates surprisingly have **significantly lower confidence in the job market** than males despite comparable placement rates and salaries and high confidence in their job search.

**Bachelor’s**

- IS Bachelor’s female representation has grown significantly in 2021-2022.

- IS Bachelor’s female representation is over twice as high as Computer Science.

**Master’s**

- IS Master’s female representation compares favorably to STEM fields such as Computer Science, but slightly lags behind Business Schools in general.

- IS Master’s female graduates dropped slightly from 2018-2019.

**International**

- International female IS graduates are represented more equally at about 57% Bachelor’s and 47% Master’s.

- International IS Bachelor’s placement is about 68% at graduation, while Master’s placement is 48% at graduation and 93% six months after graduation.

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2. AACSB, Degrees Conferred, 2020-21, https://www.aacsb.edu/
4. Independent Samples T-test, 95% confidence
 Representation BY ETHNICITY

**BACHELOR'S**

<table>
<thead>
<tr>
<th>Field</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION SYSTEMS</td>
<td>49%</td>
<td>5%</td>
<td>31%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>COMPUTER SCIENCE²</td>
<td>40%</td>
<td>4%</td>
<td>27%</td>
<td>10%</td>
<td>19%</td>
</tr>
<tr>
<td>BUSINESS SCHOOL³</td>
<td>58%</td>
<td>9%</td>
<td>9%</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>NATIONAL¹</td>
<td>58%</td>
<td>10%</td>
<td>8%</td>
<td>15%</td>
<td>9%</td>
</tr>
</tbody>
</table>

**MASTER'S**

<table>
<thead>
<tr>
<th>Field</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION SYSTEMS</td>
<td>22%</td>
<td>4%</td>
<td>65%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>COMPUTER SCIENCE²</td>
<td>2%</td>
<td>3%</td>
<td>20%</td>
<td>12%</td>
<td>64%</td>
</tr>
<tr>
<td>BUSINESS SCHOOL³</td>
<td>54%</td>
<td>10%</td>
<td>12%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>NATIONAL¹</td>
<td>53%</td>
<td>11%</td>
<td>6%</td>
<td>10%</td>
<td>19%</td>
</tr>
</tbody>
</table>

**LEGEND**

- White
- Black
- Asian
- Hispanic
- Other

3. AACSB, Enrollment by Ethnicity, 2021, https://www.aacsb.edu/

**KEY TAKEAWAYS**

- IS Master’s job market entrants are about double the percentage of African Americans than other STEM fields. However, their representation is still much less when compared to their percentage in the overall population.
- There are about 3 times more Asian IS Master’s graduates than the next largest ethnic group.
### Salaries & Offers by Industry

#### Bachelor's Students

<table>
<thead>
<tr>
<th>Size of Organization</th>
<th>% of Graduates</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Large (10,001 or more Employees)</td>
<td>71%</td>
<td>$76,809</td>
</tr>
<tr>
<td>Large (5,001-10,000 Employees)</td>
<td>10%</td>
<td>$72,264</td>
</tr>
<tr>
<td>Mid-Sized (1,001-5,000 Employees)</td>
<td>9%</td>
<td>$78,616</td>
</tr>
<tr>
<td>Small (101-1,000 Employees)</td>
<td>7%</td>
<td>$67,152</td>
</tr>
<tr>
<td>Very Small (1-100 Employees)</td>
<td>3%</td>
<td>$57,000</td>
</tr>
</tbody>
</table>

#### Master's Students

<table>
<thead>
<tr>
<th>Size of Organization</th>
<th>% of Graduates</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Large (10,001 or more Employees)</td>
<td>61%</td>
<td>$100,425</td>
</tr>
<tr>
<td>Large (5,001-10,000 Employees)</td>
<td>12%</td>
<td>$82,623</td>
</tr>
<tr>
<td>Mid-Sized (1,001-5,000 Employees)</td>
<td>13%</td>
<td>$92,632</td>
</tr>
<tr>
<td>Small (101-1,000 Employees)</td>
<td>9%</td>
<td>$87,029</td>
</tr>
<tr>
<td>Very Small (1-100 Employees)</td>
<td>5%</td>
<td>$81,250</td>
</tr>
</tbody>
</table>

#### Bachelor's | Average Salary Breakdown by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>% of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services / Banking / Accounting</td>
<td>15%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>23%</td>
</tr>
<tr>
<td>Business Services / Consulting</td>
<td>35%</td>
</tr>
<tr>
<td>Manufacturing (including Automobile, Appliances, Goods, Fabrication, Devices)</td>
<td>5%</td>
</tr>
<tr>
<td>Insurance / Real Estate / Legal</td>
<td>3%</td>
</tr>
<tr>
<td>Biotechnology / Pharmaceutical / Healthcare / Medical Services</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

#### Master's | Average Salary Breakdown by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>% of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>24%</td>
</tr>
<tr>
<td>Biotechnology / Pharmaceutical / Healthcare / Medical Services</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
<tr>
<td>Financial Services / Banking / Accounting</td>
<td>17%</td>
</tr>
<tr>
<td>Business Services / Consulting</td>
<td>21%</td>
</tr>
<tr>
<td>Government: Federal (including Military)</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Key Takeaways

- 81% of Bachelor's and 73% of Master's IS graduates accept jobs in very large or large firms.
- Biotechnology/Pharmaceutical/Healthcare/Medical are close behind the IT industry on Master’s salary.
- 35% of IS Bachelor’s and 21% of Master's go into the Business Services / Consulting field.
- The IT industry continues to pay highly and attract the largest percentage of Master’s IS graduates.
About the Data: Job types with less than 10 responses omitted below.

**BACHELOR’S | Salary Breakdown by Job Type**

**JOB CATEGORY**

- INFORMATION SECURITY ANALYSTS
  - Bachelor’s: $82,197
  - Master’s: $72,113

- OTHER IT/IS JOBS
  - Bachelor’s: $78,412
  - Master’s: $78,006

- PROJECT MANAGER
  - Bachelor’s: $76,706
  - Master’s: $110,077

- INFORMATION TECHNOLOGY ADVISOR/CONSULTANT
  - Bachelor’s: $76,454
  - Master’s: $94,032

- SOFTWARE DEVELOPERS
  - Bachelor’s: $73,664
  - Master’s: $104,448

- DATA/ANALYTICS
  - Bachelor’s: $72,982
  - Master’s: $93,402

- COMPUTER SYSTEMS ANALYSTS
  - Bachelor’s: $72,774
  - Master’s: $78,006

- INFORMATION TECHNOLOGY AUDITOR
  - Bachelor’s: $69,345

**MASTER’S | Salary Breakdown by Job Type**

**JOB CATEGORY**

- PROJECT MANAGER
  - Bachelor’s: $69,345
  - Master’s: $104,448

- SOFTWARE DEVELOPERS
  - Bachelor’s: $82,197
  - Master’s: $96,656

- OTHER IT/IS JOBS
  - Bachelor’s: $78,412
  - Master’s: $93,402

- INFORMATION TECHNOLOGY ADVISOR/CONSULTANT
  - Bachelor’s: $73,664
  - Master’s: $72,113

- DATA/ANALYTICS
  - Bachelor’s: $76,454
  - Master’s: $78,006

- COMPUTER SYSTEMS ANALYSTS
  - Bachelor’s: $76,706
  - Master’s: $94,032

- INFORMATION SECURITY ANALYSTS
  - Bachelor’s: $72,774
  - Master’s: $72,113

**KEY TAKEAWAYS**

- **Project Managers** are towards the top in salary for Bachelor's and Master's IS graduates.

- **BACHELOR’S**
  - Bachelor’s salaries grew **about 10%** since 2019.
  - **20%** of the jobs are in **Consulting**.
  - **20%** of the jobs are in **Data / Analytics**, up from 16% in 2019.

- **MASTER’S**
  - **Master’s salaries** for Software Application Developers have grown **69%** since 2013.
  - **29%** of the jobs are in **Data / Analytics**, down from about 42% in 2019.
  - **5%** received **Systems Analyst** offers compared to 27% in 2013.
Job Placement

**JOB PLACEMENT**

**AT GRADUATION**  
**6 MONTHS AFTER GRADUATION**

<table>
<thead>
<tr>
<th>Year</th>
<th>Bachelor's</th>
<th>Master's</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>81%</td>
<td>65%</td>
</tr>
<tr>
<td>2019</td>
<td>70%</td>
<td>47%</td>
</tr>
<tr>
<td>2017</td>
<td>74%</td>
<td>39%</td>
</tr>
<tr>
<td>2015</td>
<td>80%</td>
<td>65%</td>
</tr>
<tr>
<td>2013</td>
<td>75%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Placement is based on student’s reporting their job status at the time the survey was administered. The survey was distributed to graduating or recently graduated students of each participating university during April - May 2022. Offers received after a particular student completed the survey are not reflected in the above analysis.

1. AACSB, Employment Status, 2020-21, https://www.aacsb.edu/  

**KEY TAKEAWAYS**

- **Bachelor’s IS placement** of 81% upon graduation is higher than the Business School rate of 47.2%¹ and the national six month rate of 53.6%.²
- **Master’s IS placement** is higher at graduation than in previous years and significantly improves by the six month mark.
- **Confidence in the job market has stayed about the same** for Bachelor’s IS graduates at 64%, but has increased to 60% for Master’s IS graduates in 2022.
What Impacts Offers?

<table>
<thead>
<tr>
<th>Job Offer Received</th>
<th>Experience</th>
<th>Applications</th>
<th>Interviews</th>
<th>Job Search and Preparation</th>
<th>Internships</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>2.3</td>
<td>19.9</td>
<td>2.9</td>
<td>17.8</td>
<td>0.7</td>
</tr>
<tr>
<td>YES</td>
<td>2.2</td>
<td>20.3</td>
<td>6.4</td>
<td>32.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor's</th>
<th>Master's</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>4.2</td>
</tr>
</tbody>
</table>

How Do Internships Affect Offers?

<table>
<thead>
<tr>
<th>Internships</th>
<th>Bachelor's</th>
<th>Receive Offers</th>
<th>Master's</th>
<th>Receive Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>57%</td>
<td>12%</td>
<td>0</td>
<td>60%</td>
</tr>
<tr>
<td>1</td>
<td>26%</td>
<td>37%</td>
<td>1</td>
<td>23%</td>
</tr>
<tr>
<td>2</td>
<td>10%</td>
<td>34%</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>&gt;2</td>
<td>7%</td>
<td>17%</td>
<td>&gt;2</td>
<td>6%</td>
</tr>
</tbody>
</table>

Key Takeaways

- Successful IS job seekers spent more time and effort searching, but submitted about the same or fewer job applications than those who did not receive offers. This suggests that putting more effort into fewer applications can lead to job offer success.
- Bachelor's and Master's IS students are significantly more likely to get an offer if they do at least one internship.
- Surprisingly, experience has virtually no impact on offers for Bachelor's or Master's.
- Bachelor's IS graduates improve their chances of an offer by spending additional hours on preparation including professional development, resume building, and participating in career fairs.
- 80% of Bachelor's IS graduates have 1 or more internships.
- 88% of the offers went to students with 1 or more internships.
- 59% of Master's IS graduates have 1 or more internships.
- 68% of the offers went to students with 1 or more internships.
## Knowledge and Salary

### Bachelor’s

<table>
<thead>
<tr>
<th>Awareness/Literacy</th>
<th>$70,487</th>
<th>$70,296</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept/Use</td>
<td>$72,204</td>
<td>$71,648</td>
</tr>
<tr>
<td>Detailed Advanced Knowledge</td>
<td>$77,477</td>
<td>$72,841</td>
</tr>
</tbody>
</table>

### Master’s

<table>
<thead>
<tr>
<th>Awareness/Literacy</th>
<th>$81,985</th>
<th>$90,833</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept/Use</td>
<td>$93,982</td>
<td>$90,646</td>
</tr>
<tr>
<td>Detailed Advanced Knowledge</td>
<td>$98,780</td>
<td>$94,607</td>
</tr>
</tbody>
</table>

#### Skill Level Descriptions

**Awareness**
- Define, list characteristics, name components, list advantages/disadvantages

**Literacy**
- Can compare and contrast, explain, execute, define capabilities, describe interrelations, describe framework

**Concept / Use**
- Can use, communicate the idea of, form abstraction, extrapolate, list concepts, comprehension and ability to use the knowledge

**Detailed Understanding / Application Ability**
- Detailed understanding, search for and apply correct solution, design and implement, apply the principles, can select the right thing and use

**Advanced**
- Develop, originate, construct, evaluate, judge relative value

---

### Knowledge Definitions

#### IS Knowledge
- Improving Organizational Processes
- Exploiting Opportunities Created by Technology Innovations
- Understanding and Addressing Information Requirements
- Designing and Managing Enterprise Architecture
- Identifying and Evaluating Solution and Sourcing Alternatives
- Software Development
- Securing Data and Infrastructure
- Understanding, Managing, and Controlling IT Risks

#### Business and Foundational Knowledge
- Leadership and Collaboration
- Communication
- Negotiation
- Analytical and Critical Thinking including Creativity and Ethical Analysis
- Mathematical Foundations
- General Models of Business
- Business Functions
- Evaluation of Business Performance

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#### IT Does Pay to Study

IS Master’s received significantly higher salary offers when they report advanced IS knowledge.¹

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¹ Source: Adapted from Topi et al. (2010) *IS 2010 Curriculum Guidelines...* CAIS, Vol. 26, Article 18, 2010
### Knowledge Self-Ratings TOP & BOTTOM 3

#### BACHELOR’S

<table>
<thead>
<tr>
<th>Year</th>
<th>TOP 3</th>
<th>BOTTOM 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1. Communication</td>
<td>1. Securing Data and Infrastructure</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### MASTER’S

<table>
<thead>
<tr>
<th>Year</th>
<th>TOP 3</th>
<th>BOTTOM 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### KEY TAKEAWAYS

- **IS Bachelor’s** are **consistently unsure** about their software development and cyber-security skills.
- **IS Master’s** are **unsure** about their cyber-security and managing risk knowledge.
- There is **very little change** across the years in the knowledge of IS graduates.
- Employers rate **critical thinking and communication** as the most important competencies of career readiness.¹
- IS Bachelor’s and Master’s are **consistently confident** about their communication, leadership, collaboration, analytical, and critical thinking skills.

¹ NACE 2022 Job Outlook.
Job Acceptance

WHY DO BACHELOR’S ACCEPT/REJECT OFFERS?

**ACCEPT**

**HIGHEST RATED OFFER ATTRIBUTES FOR ACCEPTED JOBS**
- Process Fairness
- Organization Reputation
- Job Fit

**LOWEST RATED OFFER ATTRIBUTES FOR ACCEPTED JOBS**
- Job Attributes
- Compensation
- Recruiter

**REJECT**

**HIGHEST RATED OFFER ATTRIBUTES FOR REJECTED JOBS**
- Process Fairness
- Organization Reputation
- Recruiter

**LOWEST RATED OFFER ATTRIBUTES FOR REJECTED JOBS**
- Job Attributes
- Compensation
- Values Fit

WHY DO MASTER’S ACCEPT/REJECT OFFERS?

**ACCEPT**

**HIGHEST RATED OFFER ATTRIBUTES FOR ACCEPTED JOBS**
- Process Fairness
- Job Fit
- Organization Reputation

**LOWEST RATED OFFER ATTRIBUTES FOR ACCEPTED JOBS**
- Compensation
- Job Attributes
- Recruiter

**REJECT**

**HIGHEST RATED OFFER ATTRIBUTES FOR REJECTED JOBS**
- Process Fairness
- Recruiter
- Organization Attributes

**LOWEST RATED OFFER ATTRIBUTES FOR REJECTED JOBS**
- Compensation
- Job Attributes
- Job Fit

KEY TAKEAWAYS

- Bachelor’s and Master’s IS graduates rated process fairness the highest for job offers they accepted, and process fairness was rated the least important reason for rejecting a job offer. This indicates that IS graduates generally perceive hiring processes as fair for both jobs they accept and jobs they reject.

- Job fit plays a critical role for both Bachelor’s and Master’s IS graduates, as it appears in the most important reasons to accept an offer as well as most important reasons to reject an offer.

- Although compensation does not appear to be the primary driver of accepting a job offer, dissatisfaction with compensation does appear to be a consistent motivation to reject an offer.

**DEFINITIONS**

- **JOB ATTRIBUTES**: Challenging, interesting, enjoy, freedom
- **JOB FIT**: Looking for, match, skills, requirements
- **COMPENSATION**: Salary, bonuses, benefits
- **ORGANIZATION**: Size, location, coworkers, supervisor, facilities, environment
- **VALUES FIT**: Culture, work/life, values
- **REPUTATION**: Reputation, distinctive, prestigious
- **RECRUITER**: Answer questions, knowledgeable, informative, valuable
- **PROCESS FAIRNESS**: Timeliness, fairness, respect, helpfulness

- Bachelor’s and Master’s IS graduates rated process fairness the highest for job offers they accepted, and process fairness was rated the least important reason for rejecting a job offer. This indicates that IS graduates generally perceive hiring processes as fair for both jobs they accept and jobs they reject.

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