INDUSTRY OVERVIEW

Information and Communication Technologies (ICT) is the sector that develops products and services in telecommunications, video gaming, cybersecurity, data analytics and bioinformatics, with employers ranging from innovative startups to large global corporations. This sector includes a variety of jobs in computer programs, web interfacing, information processing and data storage.

Fields:
- Computer Programming
- Network and Support
- Multimedia and Design
- Analytics

FAST FACTS

13,375 Businesses

200,594 People employed

15,135 5-year job growth

13.7% 5-year job growth rate

$80,563 Average annual salary

Source: NAICS 54: Professional, Scientific and Technical Services used because all jobs include ICT skills. EMSI. February 2017. Non-QCEW, QCEW, self-employed and extended proprietor employment data.

Top Five Occupations by Educational Attainment and Median Hourly Wages

<table>
<thead>
<tr>
<th>HIGH SCHOOL DIPLOMA</th>
<th>ASSOCIATE DEGREE</th>
<th>BACHELOR’S DEGREE OR ABOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and Administrative Support Workers</td>
<td>Bookkeeping, Accounting and Auditing Clerks</td>
<td>Computer Systems Analysts</td>
</tr>
<tr>
<td>Receptionists and information Clerks</td>
<td>Graphic Designers</td>
<td>Information Security Analysts</td>
</tr>
<tr>
<td>Billing and Posting Clerks</td>
<td>Computer User Support Specialists</td>
<td>Software Developers, Applications</td>
</tr>
<tr>
<td>Secretaries and Administrative Assistants</td>
<td>Web Developers</td>
<td>Software Developers, Systems Software</td>
</tr>
<tr>
<td>Executive Secretaries and Executive Administrative Assistants</td>
<td>Computer Network Support Specialists</td>
<td>Database Administrators</td>
</tr>
</tbody>
</table>

$12.38 $19.84 $42.54

$14.88 $20.64 $46.32

$17.60 $26.62 $48.53

$18.02 $27.46 $54.98

$27.34 $34.18 $45.31

Knowledge
- Computers and Electronics
- Telecommunications
- Administration and Management
- Education and Training

Skills
- Speaking
- Critical Thinking
- Reading Comprehension
- Active Listening
- Complex Problem-Solving

Abilities
- Problem Sensitivity
- Oral and Written Comprehension
- Deductive Reasoning
- Inductive Reasoning

Learn more about Knowledge, Skills and Abilities at ONETonline.org/search
Sample of Local Employers

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>DESCRIPTION</th>
<th>NUMBER OF EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intuit Inc.</td>
<td>Develops software used for small business accounting (QuickBooks) and consumer tax preparation (TurboTax)</td>
<td>5,001 – 10,000</td>
</tr>
<tr>
<td>Viasat, Inc.</td>
<td>Provides internet service to customers by providing reliable communications ground systems and infrastructure</td>
<td>1,001 – 5,000</td>
</tr>
<tr>
<td>Teradata Operations, Inc.</td>
<td>Designs and delivers data storage systems that analyze information for businesses</td>
<td>10,000+</td>
</tr>
<tr>
<td>Cubic Corporation</td>
<td>Manufactures instrumentation systems for air and ground combat, global asset tracking and cyber security for defense markets</td>
<td>5,000 – 10,000</td>
</tr>
<tr>
<td>Qualcomm Inc.</td>
<td>Designs wireless communications equipment and semiconductor microchips</td>
<td>10,000+</td>
</tr>
</tbody>
</table>

Source: LinkedIn May 2017.

How do I start my career in Information and Communication Technology?

- **Learn to code** — Khan Academy (khanacademy.org) or W3Schools (w3schools.com/html)
- **Join a coding club** — Girls Who Code (sdfutures.org/girls-who-code-club-sdff), computer programming Meetup groups (meetup.com/topics/computer-programming/us/ca/san_diego)
- **Further your education and hands-on experience** — UCSD Extension courses or (extension.ucsd.edu/courses-and-programs/technology) bootcamp (codingbootcamp.extension.ucsd.edu)
- **Build your network** — Tech San Diego (techsandiego.org)
- **Connect with local community members** — San Diego Association of Information Technology Professionals (aitp.org/group/48), Technology Services Industry Association (tsia.com)

Learn more at workforce.org/mycareer