The Statistics Major Preview Sheet


<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credits</th>
<th>Language Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation to Statistics</td>
<td>R</td>
<td>English, Foreign Language and Library</td>
<td>10 – 18</td>
</tr>
<tr>
<td>Introductory Statistics Course</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theory of Probability &amp; Statistics</td>
<td>6</td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td>Statistical Methods</td>
<td>4</td>
<td>Arts &amp; Humanities</td>
<td></td>
</tr>
<tr>
<td>Experimental Design</td>
<td>3</td>
<td>Verbal Communications</td>
<td></td>
</tr>
<tr>
<td>Survey Sampling</td>
<td>3</td>
<td>Natural Sciences</td>
<td></td>
</tr>
<tr>
<td>Statistical Computing</td>
<td>6</td>
<td>Social Sciences</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced Courses</th>
<th>Math. and Comp. Sci. Requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 6 credits</td>
<td>Calculus I, II, III, Matrices and Linear Algebra</td>
</tr>
<tr>
<td>of statistics courses at 400+ level.</td>
<td>Computer Programming</td>
</tr>
</tbody>
</table>

What Can I Do with This Major?

Possible Career Areas

<table>
<thead>
<tr>
<th>Actuarial Science</th>
<th>Government (State)</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking</td>
<td>Insurance</td>
<td>Research</td>
</tr>
<tr>
<td>Data Analysis (Health)</td>
<td>Manufacturing</td>
<td>Statistical Analysis (in) Industry</td>
</tr>
<tr>
<td>Finance</td>
<td>Market Research</td>
<td>Statistical Programming</td>
</tr>
<tr>
<td>Government (Federal)</td>
<td>Plant Genetics</td>
<td>Statistical Software Development</td>
</tr>
</tbody>
</table>

Going Beyond the Minimum

Statistics majors are encouraged to go beyond the minimum requirements for the major.

All statistics majors are strongly advised to obtain a minor. A frequently chosen minor is mathematics. However, students are also advised to seek a minor in a field of application such as biology, business, economics, business, genetics, political science, psychology or sociology.

Internships with large commercial, governmental, health and industrial organizations give direct experience with applications of statistics and are valuable either in continuing to graduate school or in applying for a permanent position.

What ISU Statistics Majors are Doing After Graduation

Of the B.S. graduates from the Department of Statistics who graduated over the period from fall 2000 to spring 2013, the following are the percentages making the indicated first career choice.

<table>
<thead>
<tr>
<th>Type of Position</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce: Positions in banking, health services, insurance, and research</td>
<td>35</td>
</tr>
<tr>
<td>Governmental Positions</td>
<td>10</td>
</tr>
<tr>
<td>Industry</td>
<td>10</td>
</tr>
<tr>
<td>Graduate School</td>
<td>30</td>
</tr>
<tr>
<td>Other Situations</td>
<td>15</td>
</tr>
</tbody>
</table>
### Some Employers of Statistics Majors

This list contains the names of some organizations who have hired B.S. statistics graduates.

#### Actuarial Science
- Aviva, West Des Moines, IA
- Great Western Casualty, S. Sioux City, NE
- Liberty Mutual Ins. Co., Boston, MA
- Lincoln National Life Ins. Co., Ft. Wayne, IN
- Northwestern Mutual Life Ins., Milwaukee, WI
- Principal Financial Group, Des Moines, IA
- Towers Perrin, St. Louis, MO
- Trustmark Companies, Lake Forest, IL
- U.S. F. & G. Ins., Baltimore, MD

#### Government (State)
- Iowa Commerce Commission, Des Moines, IA
- Dept. of Health and Human Services, Des Moines, IA
- Dept. of Human Rights, Des Moines, IA
- Iowa Dept. of Personnel, Des Moines, IA

#### Insurance (other than actuarial)
- Allied Ins. Group, Des Moines, IA
- American Sentry Ins. Co., Atlanta, GA
- Associated Benefits Co., Des Moines, IA
- Conn. General Life, Kansas City, MO
- Federal Crop Ins. Program, Kansas City, MO
- Nationwide Ins., Des Moines, IA
- Rain and Hail Agricultural, Johnston, IA

#### Banking & Finance
- Chicago Research and Training, Chicago, IL
- Commercial Bank of Korea, New York, NY
- Ernst & Young, Shanghai, China
- Federal Deposit Ins. Corp., Sioux City, IA
- Nationsbank Corp., Charlotte, VA
- Wells Fargo, Des Moines, IA

#### Data Analysis (Health)
- Allied Health, Des Moines, IA
- Iowa Foundation for Medical Care, W. Des Moines, IA
- Mayo Clinic, Rochester, MN
- Quintiles Inc., Kansas City, MO.

#### Government (Federal)
- NASS, Des Moines, IA
- U.S. Bureau of the Census, Suitland, MD
- U.S. Bureau of Mines, Washington, DC

#### Statistical Programming
- Communications Data Services, Des Moines, IA
- Electronic Data Systems, Dallas, TX
- Harris Laboratories, Lincoln, NE
- STSC Inc., Rockville, MD

### Questions about the Statistics Major at ISU? Contact:
Professor W. Robert Stephenson, Director of Undergraduate Studies  
Office: 3111 Snedecor Hall    Phone: (515) 294-7805    E-mail: wrstephe@iastate.edu

For more information on the undergraduate statistics major and the Department of Statistics go to the Department’s website [www.stat.iastate.edu](http://www.stat.iastate.edu).