Your College Navigator, LLC

Admissions by design, not chance!

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9th, 10th and 11th grade students

Plan next year's high school curriculum

Begin planning for a productive summer. Investigate programs, research opportunities, internships, jobs, etc.

11th graders

Presidents' Week college visits

Continue your college research

Begin planning for your Spring Break college visits

Prepare for spring SAT and/or ACT exams

Our Upcoming Seminars

March 7 - Great Neck Library
March 8 – Mid-Island Y JCC
March 12 – Syosset Library
March 14 – Garden City Library
March 20 - Cold Spring Harbor Library
March 21- Manhasset Library

For seminar details and to register go to

www.ycnavigator.com

Athletic Recruiting

What parent (or child) doesn't dream of that photograph on "Signing Day" when that big athletic scholarship for their child is real? After all those practices and games in the freezing cold and the blaring heat, after all that carpooling, snack assignments and the cheering, as well as the consolation; you're sure your kid deserves a scholarship, right? Well we can all dream, but reality tells us a different story.

According to http://www.ncaa.org, there are a few million high school athletes, more than 460,000 NCAA student-athletes, and fewer than two percent of them will go pro in their sports. The probability of competing beyond high school is daunting. A chart on the site demonstrates just how challenging it is for high school athletes to become members of the NCAA and shows the percentage who then move on to professional sports. We'll take a more in-depth look at these statistics later in this article.

Here's what you need to know if you are interested in playing a sport in college. Your first order of business is to spend some time doing your homework on the following websites:

www.ncaa.org - The official web site of the National Collegiate Athletic Association. Read the NCAA guide for prospective collegiate athletes.

www.naia.org - The National Association of Intercollegiate Athletics, another governing body of college sports.

www.ncaaeligibilitycenter.org - *the place where student athletes need to go to register and begin the recruitment process.* The site helps students and families determine academic eligibility and amateur athlete eligibility status. Prospective student-athletes must register with the "Eligibility Center" to be considered for scholarships and financial aid.

Here are some things you'll need to think about as you consider entering the athletic recruitment process:

- Think about the concept of "fit" – make sure the school is a solid academic fit for you as well as a sports/social fit. You want to make sure you will be able to graduate in four years with a solid major and a strong transcript.
- Talk with your coach to help determine at what level you may be able to play (DI,DII,DIII).
- Be responsible for the process and don't forget to return questionnaires, send film if requested, take standardized tests, send transcripts when asked.
- Visit as many colleges as possible (unofficial). Spend some serious quality time with the coaches and other players and ask how they are treated, how well they're doing in classes and what their life at college is like.
- Be honest throughout the process and follow the rules diligently. Be straight with the coaches recruiting you and expect coaches to be honest with you.

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Majoring in Statistics/Data Science

Careers for Statistics/ Data Science Majors

- Actuary
- Algorithm Designer
- Computer Scientist
- Consultant
- Data Miner
- Database Administrator
- Economist
- Financial Analyst or Advisor
- Insurance Underwriter
- Inventory Analyst
- Market Researcher
- Mathematician
- Research Analyst
- Social Scientist
- Statistical Engineer
- Statistician
- Survey Researcher
- Teacher

So, which major is better? There's no clear answer. Both majors provide students with the type of strong quantitative skills that are attractive to employers in a wide variety of industries. As already noted, there is also some overlap between the coursework in both majors. For most students, therefore, the choice between majoring in statistics and majoring in data science will come down to weighing one's individual strengths and interests, as well as the requirements and offerings of different universities. Both majors, however, can lead to satisfying and well-compensated careers.

Students and parents can learn more about careers for statisticians and data scientists at http://thisisstatistics.org

Data scientist: one of the hottest and highest paying tech jobs around. In 2017, Glassdoor.com put data scientist at the top of its "top 50 careers" list for the second consecutive year, and the Harvard Business Review has dubbed data scientist "the sexiest job of the 21st Century."

Why all this fuss about a job title that didn't even exist until a few years ago? Simply put, today's connected world has created an explosion of data that's opening new and exciting ways of solving problems in fields as diverse as medicine, astrophysics, finance, politics, and marketing, among others. As a result, the demand for professionals who have the skills and knowledge needed to manage and crunch huge sets of information has never been higher.

A report by McKinsey Global Institute predicts that the U.S. alone will need up to 190,000 additional professionals with these skills in the next few years in order to manage the growth of big data. The U.S. Bureau of Labor Statistics predicts that jobs for statisticians will grow by 34% by 2024, much faster than the average growth of 7% predicted for all jobs.

These will be lucrative jobs, also. According to Glassdoor.com, the median salary for data scientists is currently about $113,000. Another study found that the median salary for data scientists with less than three years of experience was $80,000, while the median salary for those with nine or more years of experience topped $150,000.

Two college majors are particularly well suited for students who are interested in breaking into this exciting and well-paying field: statistics and data science. Although there is some overlap between the two majors, and both can lead to similar types of jobs, they differ in some important respects, so understanding their differences is key to deciding which major might best suit an individual student.

Statistics is the science and art of using data to make predictions and formulate explanations. Statistics has its foundation in mathematics and emphasizes developing critical thinking and problem solving skills in data analysis. Typically, statistics majors will take several semesters of mathematics, including calculus and linear algebra, as well as courses in statistical theory, applied statistics and computational statistics. Coursework also includes learning how to use computers as tools for conducting statistical analysis. A growing number of statistics departments also offer courses in data science that include deeper work on topics such as computer programming and machine learning.

According to the National Center for Educational Statistics, statistics is one of the fastest growing undergraduate majors. The number of students graduating with a bachelor's degree in statistics has grown more than 300% since the 1990s, and grew 17% between 2013 and 2014 alone. In the U.S., 129 universities and colleges currently offer undergraduate degrees in statistics. At many colleges, the statistics program is part of the Mathematics Department, although a number of Universities have separate Statistics Departments.

Data Science is a relatively new undergraduate major. It's typically an interdisciplinary major that combines coursework in computer science, statistics, and mathematics. Like statistics majors, data science majors learn how to apply statistics and mathematics to analyze and manipulate complex data in order to make predictions and provide solutions. However, data science also expands on statistics to encompass the entire life cycle of data, from its gathering and cleaning through its storage and manipulation. Data science majors typically take more computer science courses, including programming and machine learning, than statistics majors. The focus is not just on developing skills to analyze and use data, but also on how to manage, store, and navigate it.

There are currently over 40 universities and colleges that offer undergraduate degrees in Data Science, but that number is expected to grow. Because data science is an interdisciplinary major, it can be offered under the umbrella of Computer Science, Statistics, and even Business departments. In addition to the schools offering bachelors in data science, many universities offer courses, certificates or master's degrees in data science.

Financial Matters: Understanding Net Price

Families often experience sticker shock when contemplating the cost of college, but it's the **net price,** rather than the sticker price, that prospective students need to consider. Each college publishes the **COA or Cost of Attendance** at that institution. The COA includes room, board, tuition and fees, along with an estimate for books, personal expenses, and travel to and from campus. The COA is the sticker price.

Relatively few families actually pay the full COA for their child. Instead, various grants, loans, work study earnings all affect the actual net price of college. Let's look at the factors that affect the net price.

Net price depends upon the family's individual financial situation as computed by the **FAFSA (Free Application for Federal Student Aid),** the form required by all colleges. The FAFSA will calculate an **Expected Family Contribution, or EFC.** Your actual net price, however, will be affected by the college's financial aid policies that determine the percentage of need they will meet, and further affected by how much the college actually wants a particular student to enroll.

Need is the difference between cost of attendance and expected family contribution. Some colleges will meet 100% of need, while others with smaller endowments meet a lower percentage of need. When a college strongly wants to enroll a particular student (usually because of grades and test scores but also because of institutional desires that might include geographic or ethnic diversity, interest in specific majors, or special skills and aptitudes of the applicant), they will offer **grants** to make up a larger percentage of the difference between need and COA.

Your net price can be met in several ways. One component, the expected family contribution (EFC), might be met through the family's assets, college savings plans, and/or loans. A second way to meet your net price is through **self-help** money earned through the student's employment, and money that a student might borrow through a federal or state loan. The third component, or **GAP**, is the amount of need that is unmet. GAP may be paid from family assets, income, or parental loans.

To reduce your net price, include colleges that meet a high percentage of established need and those that are generous with merit aid. **Merit aid** is free money provided in the form of scholarships and grants because the college is eager to enroll that student. Applicants are most likely to qualify for merit aid if their GPA and test scores place them in the top quarter of accepted students. Therefore, by carefully including colleges on your list that offer generous merit aid and where you will be a top applicant, you can greatly reduce the net price you will pay for education.

Athletic Recruiting (continued from P. 1)

Here is the back-up research on the percentage of high school players who continue in their sport in college and beyond.

Football • About 6.5 percent, or approximately one in 16, of all high school senior boys playing interscholastic football will go on to play football at a NCAA member institution. • Less than two in 100, or 1.6 percent, of NCAA senior football players will get drafted by a National Football League (NFL) team. • Eight in 10,000, or approximately 0.08 percent of high school senior boys playing interscholastic football will eventually be drafted by an NFL team.

Men's Basketball • Approximately one in 30, or approximately 3.3 percent, of high school senior boys playing interscholastic basketball will go on to play men's basketball at a NCAA member institution. • About one in 75, or approximately 1.2 percent, of NCAA male senior basketball players will get drafted by a National Basketball Association (NBA) team. • Three in 10,000, or approximately 0.03 percent of high school senior boys playing interscholastic basketball will eventually be drafted by an NBA team.

Women's Basketball • More than three in 100, or 3.7 percent, of high school senior girls interscholastic basketball players will go on to play women's basketball at a NCAA member institution. • Less than one in 100, or approximately 0.9 percent, of NCAA female senior basketball players will get drafted by a Women's National Basketball Association (WNBA) team. • One in 4,000, or approximately 0.03 percent of high school senior girls playing interscholastic basketball will eventually be drafted by a WNBA team.

Men's Soccer • Less than three in 50, or about 5.7 percent, of high school senior boys interscholastic soccer players will go on to play men's soccer at a NCAA member institution. • Approximately 20 in 1,000, or about 1.9 percent, of NCAA senior male soccer players will be drafted by a Major League Soccer (MLS) team. • More than two in 2,000 or approximately 0.09 percent of high school senior boys playing interscholastic soccer will eventually be drafted by an MLS team.

What to Look for When Considering a College

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Check out our website for upcoming seminars

Rankings by publications such as U.S. News & World Report, Petersons, Kiplinger, Forbes, and others in the business of ranking colleges have a certain value. These lists are based on many factors such as acceptance rates, resources offered, graduation rates, student/professor ratios, and other notable features. That said, no national ranking can tell you which college or university is best for you. Your interests, personality, talents, and career goals should be a major factor in any decision.

There are many factors to examine when considering a college. A few of these are outlined below:

Strength in your area of interest – some students know which major they are interested in pursuing. Others may only know which subjects they like the most. You should determine how strong the college is in those subjects of interest to you. There is a real difference between colleges in the number and backgrounds of professors, number and quality of course offerings, research opportunities, and internship possibilities, etc. Know how strong the college is in your areas of interest.

Teaching style – each college has its own teaching style. What style is stressed by the colleges you are considering? Some put an emphasis on writing, some participative learning, some collaborative learning. Some are lecture oriented and others more small -class oriented. In which teaching style will you thrive?

Academic intensity – it is one thing to get into a college. It is another to do well while attending the college. How many hours/week of academics are expected of students at the colleges you are considering? You will be amazed at the different expectations among colleges.

Student-body Personality – what does the college look for in a student? Do they stress independent thinking or do they stress collaborative learning? Do they look for students who are committed to community learning, well rounded students or talented in specific areas? Learn what each college looks for and how well this matches your personality.

Social Activity Drivers – what drives the social activity at the college? At some colleges fraternities/sororities are the drivers; at others intramural sports play a big role. At others, activity is centered around the big football or basketball game and at others, clubs or dorm life play a big role. In which environment do you feel most comfortable?

These are just a few of the factors to consider. There are many others. Just make sure you know the college and how well the college fits you. After all, you are about to spend four years of your life there.