2019

Infographic: STEM and Medical Careers Related to Sports

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Canfield, M., & Long, L. (2019). Infographic: STEM and Medical Careers Related to Sports. () retrieved from [https://commons.erau.edu/publication/1340](https://commons.erau.edu/publication/1340)

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**SCIENCE IN SPORTS**

**Sports Scientist**
- Improve athlete health and performance
- Develop training programs
- Perform experimentation and research

**Major In:**
- Exercise Science
- Kinesiology
- Exercise Physiology
- Biomechanics
- Movement Science

**Average Salary:** $59,797

**Materials Scientist**
- Research materials
- Develop new products
- Enhance existing products
- Testing and experimentation

**Major In:**
- Material Science
- Chemistry
- Materials Engineering
- Chemical Engineering
- Mechanical Engineering

**Average Salary:** $73,954

**Sport Psychologist**
- Enhance athlete performance
- Develop mental strategies
- Help with pressures and stresses of competing

**Major In:**
- Sports Psychology
- Psychology
- Sports Science
- Performance Psychology
- Kinesiology

**Average Salary:** $70,000

**Data Scientist**
- Data-analytics problems
- Corrects data sets and variables
- Devising models and algorithms
- Interpreting data to solve problems

**Major In:**
- Mathematics
- Statistics
- Computer Science
- Management
- Information Systems

**Average Salary:** $72,000

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*NOTE: This infographic is based on findings from a larger study titled, Gamified Online Platform to Support Student-Athlete Career Readiness, funded by the NCAA Innovations in Research and Practice Grant Program.*
TECHNOLOGY IN SPORTS

IoT Architect
- Control cameras and sensors
- Capture accurate and real-time data
- Ensure security of the network
- Protect data from being hacked

MAJOR IN:
Computer Science
Computer Engineering
Mechanical Engineering
Electrical Engineering
Unmanned Aircraft Systems

AVERAGE SALARY: $77,798

Video Game Designer
- Create core features of games
- Design characters
- Develop goal and plot of games
- Engage and entertain players

MAJOR IN:
Game Design and Development
Computer Science
Software Engineering
Artificial Intelligence
Design and Development Analysis

AVERAGE SALARY: $62,260

Engineering Technician
- Solve technical problems
- Research and development
- Manufacturing and construction
- Inspection and maintenance

MAJOR IN:
Engineering Technology

AVERAGE SALARY: $47,916

Biological Technician
- Collect and test samples
- Analyze results of substances
- Use lab instrumentation and robotics
- Develop computer software

MAJOR IN:
Biological Technology
Biology
Science
Life Sciences

AVERAGE SALARY: $51,770

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ENGINEERING IN SPORTS

SPORTS ENGINEER
- Research of areas in sports
- Develop technologies, products, and processes

**MAJOR IN:**
- Mechanical Engineering
- Industrial Engineering
- Biomechanics
- Computer Science
- Aeronautical Engineering

**AVERAGE SALARY:** $85,860

3-D PRINTING ENGINEER
- Develop printing processes
- Recommend products to print
- Utilize computer-aided design

**MAJOR IN:**
- Materials & Chemical Science
- Mechanical Engineering
- Electronic Engineering
- Mechatronics
- 3D Modelling/Industrial Design

**AVERAGE SALARY:** $82,633

BIOMEDICAL ENGINEER
- Develop devices to enhance capabilities
- Improve the quality of life for individuals with impairments
- Prevent athlete injuries
- Enhance performance

**MAJOR IN:**
- Biomedical Engineering
- Biotechnology
- Engineering Technology
- Molecular Biology
- Pharmaceutical Sciences

**AVERAGE SALARY:** $85,860

CHEMICAL ENGINEER
- Solve problems with the use of chemicals
- Conduct research in the involvement chemicals in products
- Design processes and equipment

**MAJOR IN:**
- Chemical Engineering
- Biotechnology
- Engineering Technology
- Forensic Chemistry
- Materials Engineering

**AVERAGE SALARY:** $104,910

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MATHMATICS IN SPORTS

SPORTS STATISTICIAN
• Develop mathematical programs and models to predict outcomes
• Recommend changes to increase team success

MAJOR IN:
Mathematics
Statistical Analysis
Economics
Computer Science

AVERAGE SALARY: $80,500

SPORTS ECONOMIST
• Research and solve economic problems
• Conduct surveys and collect data
• Analyze data using mathematical models, statistical techniques, and software

MAJOR IN:
Economics

AVERAGE SALARY: $100,270

MARKET RESEARCH ANALYST
• Study current economic market conditions
• Help sports organizations become aware of potential sales for their products

MAJOR IN:
Market Research
Statistics
Mathematics
Computer Science

AVERAGE SALARY: $88,350

OPERATIONS RESEARCH ANALYST
• Use techniques like optimization, data mining, statistical analysis and mathematical modeling
• Develop solutions for organizations to operate more efficiently and cost-effectively

MAJOR IN:
Mathematics
Operations Research
Statistics
Computer Science
Management Science

AVERAGE SALARY: $81,390

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HEALTH IN SPORTS

**Sports Dietitian**
- Individual and team nutrition counseling
- Educate to enhance performance
- Menu development plans
- Analyze outcomes of nutritional services

**Major In:**
- Sports Nutrition
- Nutrition
- Kinesiology
- Food Science
- Dietetics

**Average Salary:** $42,261

**Physical Therapist**
- Rehabilitate injured athletes
- Diagnose problems
- Evaluate patient progress
- Develop treatment plans

**Major In:**
- Kinesiology
- Biology
- Health Sciences
- Athletic Training
- Exercise Physiology

**Average Salary:** $82,390

**Personal Trainer**
- Help create a healthier lifestyles
- Educate about health and fitness
- Achieve clients’ personal fitness goals

**Major In:**
- Exercise Science
- Personal Training
- Sports Medicine
- Fitness and Health Management
- Exercise Physiology

**Average Salary:** $60,136

**Chiropractor**
- Improve athletic performance
- Improve range of motion and flexibility
- Prevent injuries
- Adjust patient spinal column
- Advise patients on health and lifestyle

**Major In:**
- Chiropractic
- Human biology
- Kinesiology
- Exercise Science

**Average Salary:** $68,640

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HEALTH IN SPORTS

ORTHOPEDIC SURGEON

- Prevention, diagnosis, and treatment of musculoskeletal disorders and athlete injuries

**MAJOR IN:**
- Biology
- Pre-medicine
- Human Physiology
- Health Sciences
- Chemistry

**AVERAGE SALARY:** $477,260

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PHYSIATRIST

- Treatment of function and to treat a variety of disorders
- Help athletes recover from a previous injury and surgery.

**MAJOR IN:**
- Physical Therapists
- Occupational Therapists
- Physician Extenders

**AVERAGE SALARY:** $230,600

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PODIATRIST

- Work with lower body extremities involving feet, ankles, and lower legs
- Diagnose and treat which can lead to surgery

**MAJOR IN:**
- Anatomy
- Physiology
- Pharmacology
- Pathology

**AVERAGE SALARY:** $201,550

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MENTAL HEALTH CLINICIAN

- Provide counseling services
- Help athletes overcome fear of performing
- Help with anxieties in life

**MAJOR IN:**
- Counseling
- Psychology
- Social Work
- Social Science
- Sports Psychology

**AVERAGE SALARY:** $61,800

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