GIS Internships in the Campus Community

Kevin B. Cary, GISP
Instructor of GIS & Geography
Manager of WKU Center for GIS
Dept. of Geography & Geology

WKU GIS Programs

- Certificate in GIS

- Graduate Certificate in GIScience

- Minor in GIS

- Bachelor of Science in GIScience

- Master of Science in Geoscience

Core Courses (14 Credit Hours)

- GEOG 316 *Fundamentals of GIS* (4hrs)

- GEOG 317 *GIS* (4hrs)
  - Requires prerequisite of GEOG 316

- GEOG 417(G) *GIS Analysis & Modeling* (3hrs)
  - Requires prerequisite of GEOG 317

- GEOG 419(G) *GIS Programming* (3hrs)
  - Requires prerequisite of GEOG 317
  - Requires prerequisite of **CS 170 "Python"**

Bachelor of Science in GIScience
(First graduate of program in May 2011)

- All courses in both GIS Certificate & GIS minor
- Additional required courses
  - Math 118 *College Algebra and Trigonometry*
  - Math 183 *Intro to Statistics*
  - GEOG 391 *Data Analysis & Interpretation*
  - CE 160/161 *Surveying I and Surveying I Lab*
  - CS 180 *Programming I "Java"*
  - GEOG 300 *Geographic Research*
- GEOG 495 Internship
- <u>No minor required</u> although students are encouraged to minor in Land Surveying, Computer Science or CIS.

Bachelor of Science in GIScience
(First graduate of program in May 2011)

- GEOG 414 Remote Sensing

- GEOG 418 Internet GIS

- GEOG 423 Urban GIS Applications

- GEOG 443 Spatial Database Management

- GEOG 492 Advanced Spatial Analysis

- GEOG 499 Professional Preparation

Past Internship Opportunities

- WKU
  - Dept. of Planning, Design, and Construction
  - Baker Arboretum
- Kentucky Climate Center
- Barren River Area Development District
- Land Surveying Firm
- Property Value Administrator's Office (PVA)

WKU PDC

- GISP Supervisor
- GPS Trimble Geo-XT and Geo-XH
  - GPS Analyst
  - GPS Correct
- Stormwater infrastructure
  - Updating
  - Creating
  - Network
  - Attributes
- Slope Analysis
- ArcSDE
- Aerial Photos

WKU Baker Arboretum

- Tree inventory

- Teaching

- End Users

Kentucky Climate Center

- Supervisor: Kentucky State Climatologist

- Create flash flood climatology for entire Appalachian region.

- Creating a GIS workflow

- Spatial Analysis with ArcGIS to produce information.

- Map Automation (Python)

BRADD

- Supervisor: Associate Director of Planning and Development Services

- Hazard mitigation plan.

- Creating large format maps for county meetings.

Land Surveying Firm

- Supervisor: Professional Land Surveyor
- Integrating GIS into a surveying firm.

PVA

- Supervisor: Property Value Administrator
- Transition to GIS
- Training

Where did they go?

- ESRI
  - *Desktop Support Analyst*
- WKU PDC
  - *GIS Project Manager*
- WKU FM
  - *Campus Infrastructure and Data Specialist*
- Local Surveying Firm in Bowling Green
  - *GIS Coordinator and Surveying Technician*
- Green River Area Development District
  - *GIS Analyst*
- Veolia Water North America
  - *GIS Technician*