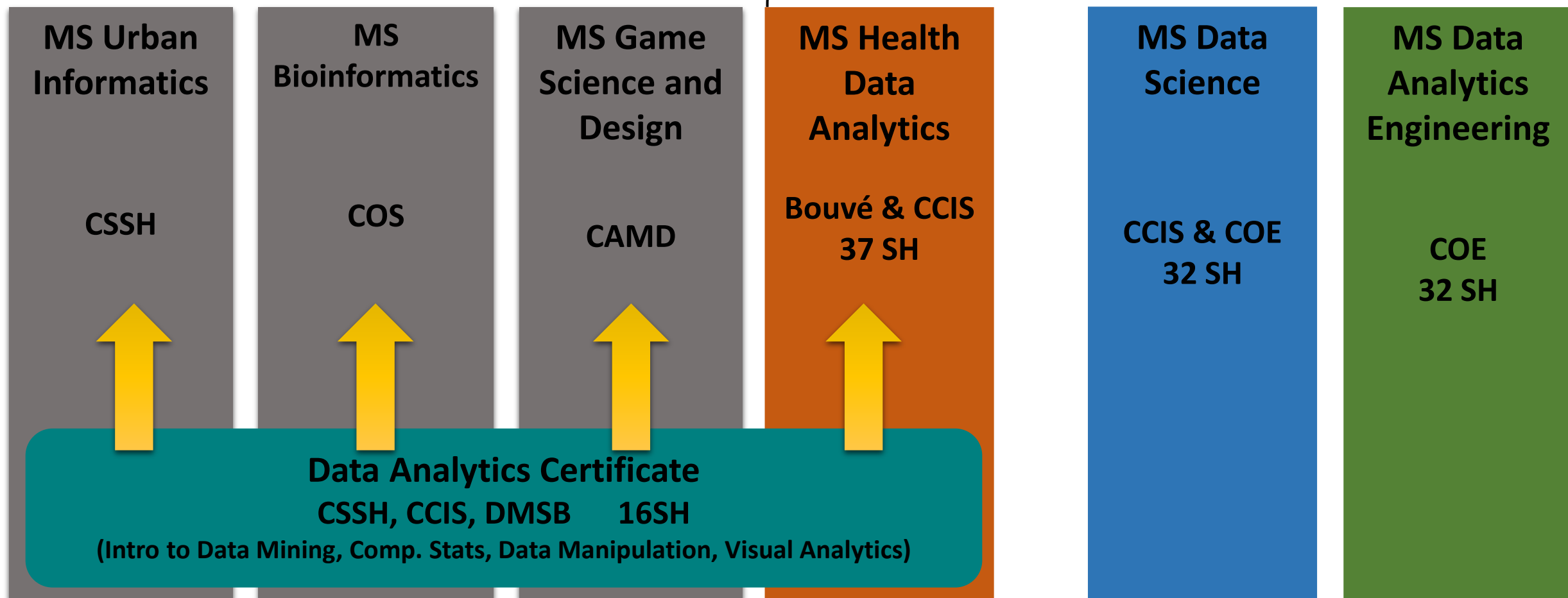


The Data Landscape

Proposed Programs



The Common Foci

Data Mining

- **MSDS**: In-depth, two course sequence
- **MSHDA**: Intro and fundamental techniques
- **MSDAE**: Focus on engineering applications

Statistics

- **MSDS**: Placement; Integrated into ML courses
- **MSHDA**: Application of comp. statistics
- **MSDAE**: In-depth, two course sequence

Data Processing

- **MSDS**: Emphasizes parallel data processing
- **MSDHA**: Introductory, focus on health data
- **MSDAE**: Emphasis on enterprise databases

Data Presentation & Visualization

- Covered in the three programs
- Differing emphasis on technical elements

Distinctive Features of the MS programs

| | Data Science | Health Data Analytics | Data Analytics Engineering |
|---|--|---|---|
| Background of Most Incoming Students | STEM | Health Sciences | Engineering |
| Program Strengths | Programming Machine Learning, Algorithms High-Performance Computing | Modeling Predictive Analytics of Health Data | Operations Research Stat. & System Modeling Engineering Applications |
| Representative Career | Software industry Social Media | Healthcare Systems Insurance | Smart Manufacturing Logistics |