Why is a Course Unifying V&V Important?

The potential for increasing software quality through a more effective comprehensive approach to verification and validation is enormous. Yet few computer science or computer engineering programs have comprehensive coverage of methods and tools for V&V, and even fewer have attempted courses that present a unified perspective of V&V methods. Instead, the many aspects of V&V are typically taught in isolation using language-specific tools. Moreover, the role of software design in facilitating V&V is often not emphasized. Thus the potential benefits from more effective V&V cannot be attained because of lack of professional staff capable of designing and implementing more effective methods and processes for V&V.