Computer Science Curriculum, Outcomes and Assessment Diagram (April 18, 2011)

Institutional Learning Outcome	PLNU Mission Component	Department Learning Outcomes	Program Learning Outcomes	Introduced	Reinforced	Mastery	Measure	Global Measure
Learning: Informed by our Christian Faith: Members of the PLNU community will display openness to and mastery of foundational knowledge and perspectives; think critically, analytically, and creatively; and communicate effectively.	*….minds are engaged and challenged*	Graduates will have a coherent and broad based knowledge of their discipline. (Learning/Teach)	Students will be able to write correct and robust software.	CSC143	CSC153 CSC254 CSC354 CSC394 ISS424*	CSC324 CSC493	CSC 254 Signature Assignment (A) *To be developed.*	TEACH: ETS overall score (A) Alumni Survey (5)
			Students will use the theory of algorithms and computation to solve problems.	CSC133 MTH164 MTH174	CSC254 CSC394 MTH274* MTH343	CSC354 CSC422	ETS: Structures and algorithms subscore (A)	
			Students will analyze the interaction between hardware and software.	CSC133 CSC143	CSC153 CSC254 CSC314 CSC374 CSC422 ISS414* ISS424*	CSC394 CSC454 CSC493	ETS: Computer Organization, Architecture and Operating Systems subscore (A) and CSC314 Signature Assignment (A) *To be developed.*	
Growing: In a Christian Faith Community: Members of the PLNU community will demonstrate God-inspired development and understanding self and others and live hospitably within complex professional, environmental and social contexts.	*….character is modeled and formed*	Students will develop characteristics necessary to be effective members of the communities where they work and live. (Growing/Shape)	Students will be able to apply their technical knowledge to solve problems.	CSC143 MTH203* MTH233* MTH382* MTH392* ISS242*	CSC153 CSC254 CSC412 MTH373* ISS424*	CSC354 CSC493 ISS414* ISS472^ HON498 & HON499^ CSC496 & CSC497^ CSC498 & CSC499^ CSC481	CSC493 Signature Assignment (2) *To be developed.*	
			Students will be able to speak about their work with precision, clarity and organization	COM100 CSC153 CSC254	CSC324 CSC354	CSC481 CSC493 ISS472^ HON498 & HON499^ CSC496 & CSC497^ CSC498 & CSC499^	Senior Seminar: Oral presentation evaluated by a jury using a rubric (A).	
			Students will be able to write about their work with precision, clarity and organization	WRI110 CSC153 CSC254	CSC324 CSC354	CSC481 CSC493 ISS472^ HON498 & HON499^ CSC496 & CSC497^ CSC498 & CSC499^	Senior Seminar: Written summary evaluated by a jury using a rubric (A).	
			Students will collaborate effectively in teams.	CSC143 CSC153 MTH164	CSC254 CSC314 CSC354 CSC454	CSC324 CSC493 CSC496 & CSC497^ ISS424*	CSC324 Group assignment (2) Group rubric/questionnaire *To be developed.*	
Serving: In a Context of Christian Faith: Members of the PLNU community will engage in actions that reflect Christian discipleship in a context of communal service and collective responsibility, serve both locally and globally in a vocational and social setting.	*….service becomes an expression of faith*	We believe that work is an act of service. Graduates will be prepared to serve a complex world through their technical and professional abilities. (Serving/Send)	Graduates will be prepared for: • careers that use computer science in business, industry, government and the non-profit sector ; and • graduate study in fields related to computer science.	This occurs throughout the curriculum in every class and is the overall goal of the program.			Overall ETS Score (A) Alumni survey (5)	

A – means that the measure is done annually (once it has been phased into the cycle)
2 – means that the measure done every two years (once it has been phased into the cycle)
5 – means that the measure done every five years (once it has been phased into the cycle)
* - means and elective
^ - means that the student must choose one in the list