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Soggetti	Cybernetics - Study and teaching Internet of things
Lingua di pubblicazione	Inglese
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Nota di contenuto	The transformative nature of CPS and workforce needs -- CPS principles, foundations, system characteristics, and complementary skills -- Paths to CPS knowledge -- Developing and institutionalizing CPS curricula -- Appendixes -- Appendix A: Biographies of Committee members and staff -- Appendix B: Briefers to the Study Committee -- Appendix C: Workshop agendas.
Sommario/riassunto	"Cyber-physical systems (CPS) are 'engineered systems that are built from, and depend upon, the seamless integration of computational algorithms and physical components.' CPS can be small and closed, such as an artificial pancreas, or very large, complex, and interconnected, such as a regional energy grid. CPS engineering focuses on managing inter- dependencies and impact of physical aspects on cyber aspects, and vice versa. With the development of low-cost sensing, powerful embedded system hardware, and widely deployed communication networks, the reliance on CPS for system functionality has dramatically increased. These technical developments in combination with the creation of a workforce skilled in engineering CPS will allow the deployment of increasingly capable, adaptable, and trustworthy systems"--

