

Course and curriculum development for Creative Technology	
Title: Living and Working Tomorrow Date: 20080513	Author: Maarten Bonnema Version: 1.0
Course name	CA2: Living and Working Tomorrow
Study load	6 in European Credits (30 EC is one semester).
Semester	1-2
Contents	<p>In this creative application, the student explores in a group, the application of several new technologies in a future living or working situation. This requires:</p> <ul style="list-style-type: none"> • an investigation into the new technologies, • generation of several application scenarios of these technologies, • development of concepts of products and/or services that apply to one of the generated scenarios, • creation of a prototype, • evaluation of the prototype. <p>In project-lectures the relevant tools are presented. Also, a basic course in writing a report is given.</p>
Prerequisites	An eager mind Courses DE2, MA1, CS1 and ST1
Goals and attainment targets	Upon completion the student is aware of characteristics of new technologies and is able to identify opportunities for exploitation of a technology. In particular the possibilities of cooperating sensors and actuators to create "smart behaviour" of the system will be explored. Also, the student is familiar with working in a group, organising the work, and writing a legible report.

Course and curriculum development for Creative Technology (continued)	
Course name	see page 1
Place in curriculum	The contents of the courses DE2, MA1, CS1 and ST1 are used to complete the assignment. The assignment can be seen as integrating the topics of these courses, and to apply them in a realistic problem.
Application area, motivating examples	As the theme is living and working tomorrow, typical assignments are: High-tech office assistant (a robot that assists in office chores like getting coffee, copying, providing supplies, having a chat here and there) The assisting home (a home with added technology to aid elderly and handicapped people to live autonomously longer, while the health condition is carefully monitored) Kindergarten tomorrow (providing toddlers with interactive toys that stimulate their development, monitor their health, and test their progress)
Teaching methods	The largest part of the time will be spent in group-work. Lectures will be given at appropriate moments during the project, about at relevant topics for that moment. Also application of new technologies, like the ones in ST1, are presented in lectures. On the one side to stimulate students' creativity, on the other hand to provide extra information on the technology. Students have to present their work as a group, write a report and creating a display for their design.
Nr of participants	Groupsize about 6 students. Multiple groups work in parallel as competitors.
Special facilities	Group-work area.