DOBRA Mirela

Nr.crt.	Titlu	Scurta descriere	Cerinte	Nivel (licenta/master)
1	Low cost paper shredder machine	- Aquisition stage: decide the suitable electrical drive, cutter blades, coupling elements - Establish the control strategy	- Abilităţi practice pentru implementarea de soluţii tehnice cu cost redus	Licenţă
2	Modelling, Simulation and Implementation of the Cooling System in a room	- Use of mathematical models for LTI systems	- Utilizarea algoritmilor din Matlab dedicaţi modelării şi simulării sistemelor LTI	Licenţă
3	Interactive Learning Modules for Control	- Matlab GUI offering access to specific parameters	- Răspuns în frecvenţă – diagrame Nyquist, Bode and Nichols	Licenţă
4	Interactive Learning Modules for Control	- Matlab GUI offering access to specific parameters	- Observeri de stare	Licenţă
5	Modelling and simulation of essential oil extractors	- Use of mathematical models for LTI systems	- Utilizarea algoritmilor din Matlab dedicaţi modelării şi simulării sistemelor LTI	Licenţă
1	Digital oscilloscope: low power implementation	- Sampling techniques	- Cunoştinţe de electronică	Master
2	Signal generator software	- Function generators in Matlab	- Programare în Matlab	Master
3	Logic analyzer software	- Matlab implementation	- Analiza în frecvenţă	Master
4	Reduced code generation for data acquisition	- Simulink Coder™ (formerly Real-Time Workshop®) generates and executes C and C++ code from Simulink® diagrams,	- Cunoştinţe avansate de C/ C++	Master

		code outside MATLAB and Simulink.		
5	Backstepping sliding mode control for second and third order transfer functions	- Discrete time implementation	- Sliding mode control	Master
6	Design and real-time implementation of perturbation observer based sliding-mode control for second order systems	- Discrete time implementation	- Observer design	Master
7	Reduced code generation for control application	- Simulink Coder™ (formerly Real-Time Workshop®) generates and executes C and C++ code from Simulink® diagrams, code outside MATLAB and Simulink.	- C2000 family (TI)	Master