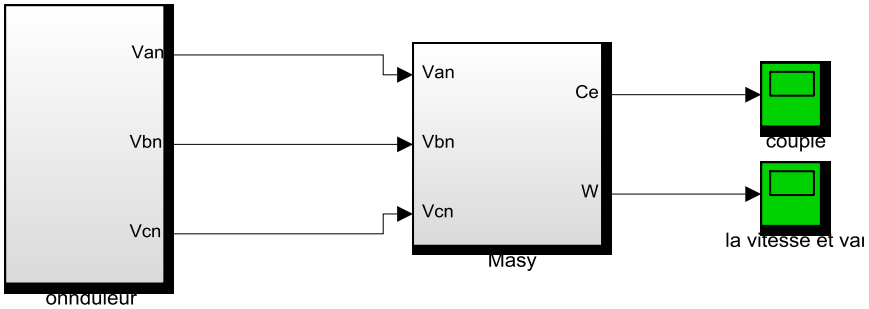
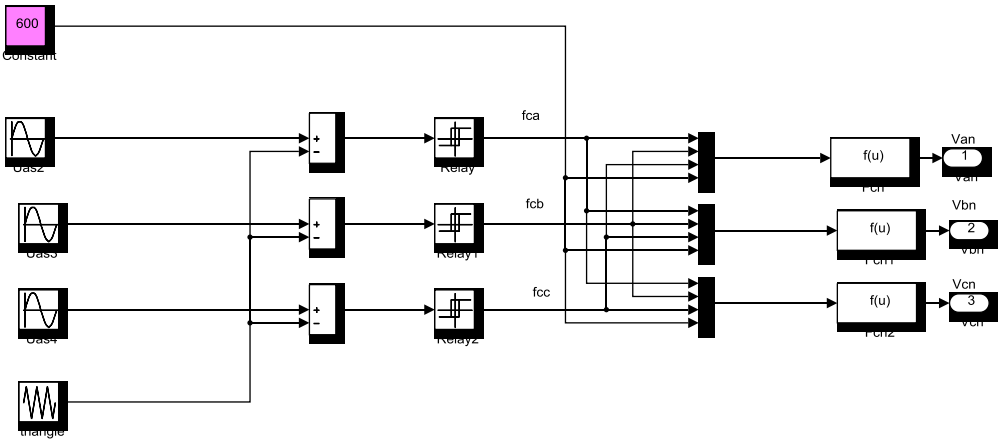
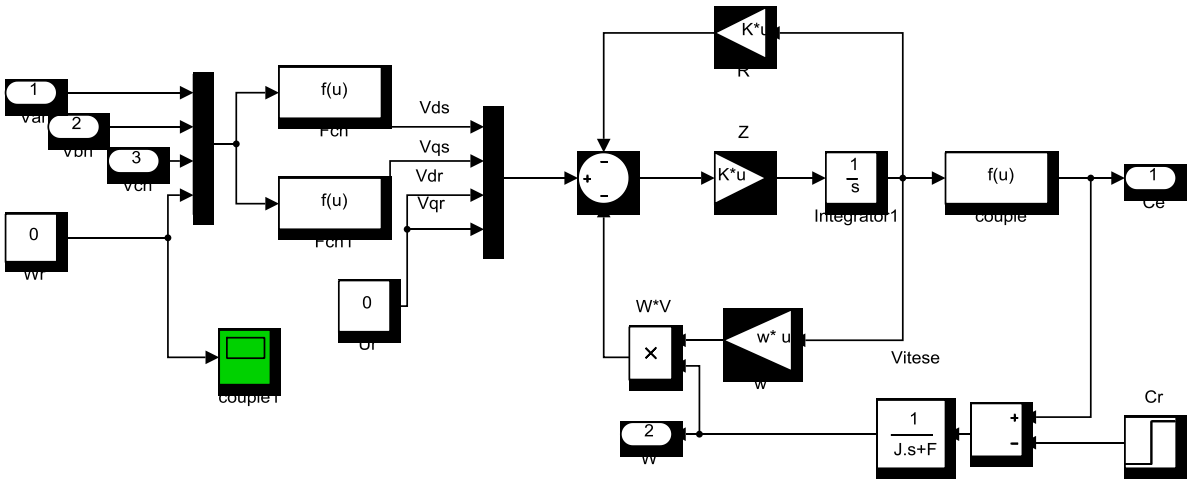
العمل التطبيقي الرابع



الشكل الاول



الشكل الثاني



الشكل الثالث

Onduleur

Source Triangle

Case 1 : [0 (1/fs)/4 (1/fs)*(3/4) 1/fs]

Case 2: [0 1 -1 0]

Les fonctions d'onduleurs

Fcn : (u[4]/3)*((2*u[1])-u[2]-u[3])

Fcn1 : (u[4]/3)*(-u[1]+(2*u[2])-u[3])

Fcn2 : (u[4]/3)*(-u[1]-u[2]+2*u[3])

Machine asynchrone

Fcn : sqrt(2/3)*(u(1)*cos(u(4))+u(2)*cos(u(4)+2*pi/3)+u(3)*cos(u(4)+4*pi/3))

Fcn1 : -sqrt(2/3)*(u(1)*sin(u(4))+u(2)*sin(u(4)+2*pi/3)+u(3)*sin(u(4)+4*pi/3))

Couple : P*(M/Lr)*(3/2)*(u[3]*u[2]-u[1]*u[4])

Cr = step time 1 ; initial value 0; finale value = 15;

Les paramètres

```
clear;
clc;
%%%%%%%%%%%%%%%%%%%%%%%%%%%paramètre de la machine asynchrone
Ls=0.274      ;
Lr=0.274      ;
Rr=3.805      ;
Rs=4.85       ;
M=0.258       ;
J=0.031       ;
P=1           ;
p=P           ;
F=0           ;
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%paramètre de filtre
R=10          ;
L=100e-3      ;
C=250e-6      ;
A=L*C         ;
B=L/R         ;
%%%%%%%%%%%%%%%%%%%%%%%%%%% fréquence de la source triangulaire
fs=2000;
R=[Rs 0  0   0  ;
   0  Rs 0   0  ;
   0  0  Rr  0  ;
   0  0  0   Rr];
w=[0   0  0   0  ;
   0   0  0   0  ;
   0   M  0   Lr ;
   -M  0  -Lr 0 ];
L=[Ls  0  M   0  ;
   0 Ls  0   M  ;
   M  0   Lr  0 ;
   0  M   0   Lr];
Z=inv(L);
```